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ABSTRACT

Accessibilty features of buildings and facilities provide the opportunity for handicapped persons in the community to become more self-reliant and independent; barrier-free design can enable a person with disabilities to achieve his or her potential for contributions to society. In 1989, the Florida Legislature passed a bill mandating changes to the requirements for accessibilty for the physically handicapped. The bill also stipulated that the Department of Community Affairs be required to prepare a manual that fully explains the relationship and requirements of the American National Standards Institute (ANSI) standard and Part V of Chapter 553, Florida Statutes, relating to handicapped accessibility. This publication will be useful to many groups throughout the state in determining the minimum requirements for providing accessibility. Included within this manual are the requirements of Part V, Chapter 553, Florida Statutes; the mandatory portions of ANSI A117.1, 1986; definitions; interpretive illustrations; special notes; and three appendixes containing copies of the relevant legislation. The special notes contain additional data that should help to clarify the minimum requirements of the code. The text is laid out in concert with the interpretive illustrations so that a verbal and graphic representation of the subject matter is presented together. (KM)

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ACCESSIBILITY REQUIREMENTS MANUAL

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EA 021 541

DEPARTMENT OF COMMUNITY AFFAIRS

FLORIDA BOARD OF BUILDING CODES AND STANDARDS

ACCESSIBILITY REQUIREMENTS MANUAL

JANUARY 1990
(First edition, first printing)

This public document was promulgated at a cost of $38,054 or $9.51 per copy to provide standards for accessibility.

Department of Community Affairs
Florida Board of Building Codes and Standards

PREFACE

The 1989 Florida Legislature passed a bill which mandated many changes to the requirements for accessibility for the physically handicapped. The bill also stipulated that the Department of Community Affairs (DCA) be required to prepare a manual which fully explains the relationship and requirements of the American National Standards Institute standard and Part V of Chapter 553, Florida Statutes relating to handicapped accessibility.

This manual was published by the Department of Community Affairs in association with the Florida Agricultural and Mechanical University's Institute for Building Sciences, School of Architecture, whom illustrated many of the interpretive drawings and designed the cover. A large portion of the text and illustrations were taken from the standard with permission from the American National Standards Institute. Copies of the standard, ANSI A117.1, 1986 may be obtained from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018. A thank you is extended to both these institutions for their contributions and support.

Many different groups throughout the state including building departments, design professionals, builders and handicapped advocates will use this publication in determining the minimum requirements for providing accessibility. Included in the manual are the requirements of Part V, Chapter 553, Florida Statutes; the mandatory portions of ANSI A117.1, 1986; definitions; interpretive illustrations; special notes; and an appendix of legislation relating to issues that affect the disabled. The text is laid out in concert with the interpretive illustrations so that a verbal and graphic representation of the subject matter is presented together. It should be noted that the interpretive illustrations are often construed as the code itself. Let us emphasize that the accessibility code is found in the appendix section in the back of the manual. The illustrations represent interpretations and if there is a conflict between the illustrations and the narrative code, the narrative takes precedence. The special notes contain additional information that should be helpful in clarifying and understanding the minimum requirements of the code.

The code and manual address accessibility features designed for the physically handicapped adult. It does not address the special needs of the physically handicapped child; however, the Florida Department of Education is currently developing a standard that identifies the special design requirements needed to provide accessibility for physically handicapped children.

Accessibility features of buildings and facilities provide the opportunity for handicapped persons in the community to become more self reliant and independent. Barrier free design can enable a person with disabilities to achieve his or her potential for contributions to our society.

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DEFINITIONS (ANSI A117.1, 3.5, 1986 and Subsection 553.48(4)(a), F. S.)

The following terms shall, for the purpose of this standard, have the meaning indicated in this section.

access aisle. An accessible pedestrian space between elements, such as parking spaces, seating, and desks, that provides clearances appropriate for use of the elements.

accessible. Describes a site, building, facility, or portion thereof that complies with this standard and that can be approached, entered, and used by physically handicapped people.

accessible route. A continuous unobstructed path connecting all accessible elements and spaces in a building or facility that can be negotiated by a person with a severe disability using a wheelchair and that is also safe for and usable by people with other disabilities. Interior accessible routes may include corridors, floors, ramps, elevators, lifts, and clear floor space at fixtures. Exterior accessible routes may include parking access aisles, curb ramps, walks, ramps, and lifts.

addition. An expansion, extension, or increase in the usable space within a building or facility.

adaptability. The capability of certain building spaces and elements, such as kitchen counters, sinks, and grab bars, to be altered or added so as to accommodate the needs of persons with and without disabilities, or to accommodate the needs of persons with different types or degrees of disability.

administrative authority. A jurisdictional body that adopts or enforces regulations and standards for the design, construction, or operation of buildings and facilities.

alteration. A change or rearrangement, within buildings or facilities, in the structural parts or elements, or in the means of egress, or in moving from one location to another. Alteration does not include normal maintenance and repair, reroofing, interior wall and ceiling finishes, or changes to plumbing, mechanical, or electrical systems.

assembly area. A room or space accommodating a number of individuals as specified by the authority having jurisdiction and used for religious, recreational, educational, political, social, or amusement purposes, or for the consumption of food and drink, including all connected rooms or spaces with a common means of egress and ingress. Such areas as conference rooms would have to be accessible in accordance with other parts of this standard, but would not have to meet all of the criteria associated with assembly areas.

authority having jurisdiction. See *administrative authority*.

automatic door. A door equipped with a power-operated mechanism and controls that open and close the door automatically upon receipt of a momentary actuating signal. The switch that begins the automatic cycle may be a photoelectric device, floor mat, sensing device, or manual switch mounted on or near the door itself (see *power-assisted door*).

children. People below the age of twelve (that is elementary school age and younger).

circulation path. An exterior or interior way of passage from one place to another for pedestrians, including, but not limited to, walks, hallways, courtyards, stairways, and stair landings.

clear. Unobstructed.

common use. Refers to those interior and exterior rooms, spaces, or elements that are made available for the use of a restricted group of people (for example, residents of an apartment building, the occupants of an office building, or the guests of such residents or occupants).

coverage. The extent or range of accessibility that a particular administrative authority adopts and requires.

cross slope. The slope of a pedestrian way that is perpendicular to the direction of travel (see *running slope*).

curb ramp. A short ramp cutting through a curb or built up to it.

detectable. Perceptible by one or more of the senses.

detectable warning. A standardized surface texture applied to or built into walking surfaces or other elements to warn visually impaired people of hazards in the path of travel.

disability. A limitation or loss of use of a physical, mental, or sensory body part or function.

dwelling unit. A single unit of residence that provides a kitchen or food preparation area, in addition to rooms and spaces for living, bathing, sleeping, and the like. A single-family home is a dwelling unit, and dwelling units are to be found in such housing types as townhouses and apartment buildings.

egress, means of. A path of exit that meets all applicable code specifications of the regulatory building agency having jurisdiction over the building or facility.

element. An architectural or mechanical component of a building, facility, space, or site that can be used in making functional spaces accessible (for example, telephone, curb ramp, door, drinking fountain, seating, water closet).

existing building. Any building or structure constructed, under design or construction, or under construction contract prior to January 1, 1990.

facility. All or any portion of a building, structure, or area, including the site on which such building, structure, or area is located, wherein specific services are provided or activities are performed.

functional spaces. The rooms and spaces in a building or facility that house the major activities for which the building or facility is intended.

housing. A building, facility, or portion thereof, excluding inpatient health care facilities, that contains one or more dwelling units or sleeping accommodations. Housing may include, but is not limited to, one-family and two-family dwellings, multifamily dwellings, group homes, hotels, motels, dormitories, and mobile homes.

level. A surface the slope of which does not exceed 1/4 inch vertically for each 14 inches horizontally.

marked crossing. A crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.

multifamily dwelling. Any building containing more than two dwelling units.

new construction. New construction, erection, alteration, rehabilitation, or repair which was not in existence, under design or construction, or under construction contract on or prior to January 1, 1990.

operable part. A part of a piece of equipment or appliance used to insert or withdraw objects, or to activate, deactivate, or adjust the equipment or appliance (for example, coin slot, pushbutton, handle).

physically handicapped person. An individual who has a physical impairment, including impaired sensory, manual, or speaking abilities, that results in a functional limitation in gaining access to and using a building or facility.

power-assisted door. A door used for human passage, with a mechanism that helps to open the door, or to relieve the opening resistance of the door, upon the activation of a switch or the use of a continued force applied to the door itself. If the switch or door is released, such doors immediately begin to close or close completely within 3 to 30 seconds (see *automatic door*).

principal entrance. An entrance intended to be used by the residents or users to enter or leave a building or facility. This may include, but is not limited to, the main entrance.

public use. Describes interior and exterior rooms or spaces that are made available to the general public. Public use may be provided at a building or facility that is privately or publicly owned.

ramp. A walking surface in an accessible space that has a running slope greater than 1:20.

replacement value. The actual cost to replace or rebuild the same structure at a given period of time.

restroom. A multiple-station sanitary facility having two or more toilet compartments or stalls in any combination.

running slope. The slope of a pedestrian way that is parallel to the direction of travel (see *cross slope*).

service entrance. An entrance intended primarily for delivery or service.

signage. Verbal, symbolic, and pictorial information.

site. A parcel of land bounded by a property line or a designated portion of a public right-of-way.

site improvements. Landscaping, pedestrian and vehicular pathways, outdoor lighting, recreational facilities, and the like, added to a site.

sleeping accommodations. Rooms in which people sleep (for example, dormitory and hotel or motel guest rooms).

space. A definable area (for example, toilet room, hall, assembly area, entrance, storage room alcove, courtyard, or lobby).

substantial improvement. Any repair, alteration, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the replacement value of the structure either:

a. Before the repair or improvement is started; or

b. If the structure has been damaged and is being restored, before the damage occurred.

tactile. Describes an object that can be perceived using the sense of touch.

temporary. Applies to facilities that are not of permanent construction but are extensively used or essential for public use for a given (short) period of time, for example, temporary classrooms or classroom buildings at schools and colleges, or facilities around a major construction site to make passage accessible, usable, and safe for everybody. Structures directly associated with the actual processes of major construction, such as portable toilets, scaffolding, bridging, trailers, and the like, are not included.

toilet room. A single-station sanitary facility having at least one water closet.

vehicular way. A route intended for vehicular traffic, such as a street, driveway, or parking lot.

walk. An exterior pathway with a prepared surface intended for pedestrian use, including general pedestrian areas such as plazas and courts.

walking aid. A device used by a person who has difficulty walking (for example, a cane, crutch, walker, or brace).

walkway. The accessible route, on private property, in front of one or a series of single tenant occupancies. Such walkway serves accessible entrance doors. Such walkway shall be considered part of the building.

ACCESSIBILITY FEATURES - BUILDINGS - NEW, ALTERED, CHANGE IN USE
(Section 553.48, Florida Statutes)

1. The accessibility standards adopted herein shall be applicable to all new construction, including factory-built buildings, substantial improvements, alterations, additions, and changes in occupancy as follows:

2. All new construction except as exempt herein.

3. Existing buildings which are substantially improved shall be made to comply with the provisions of this part for new construction.

4. Each element or space of a building or facility that is altered shall comply to the extent it is altered with the applicable provisions of this manual unless structurally impracticable.

5. These provisions shall apply to buildings and facilities designated as historic structures that undergo alterations or a change in use groups.

6. When the use of the building changes, only the doors, entrances, floors, exits, and required public toilet rooms must conform to the requirements of this section.

7. Any building which was under construction contract entered into on or after October 1, 1974, but before January 1, 1990, shall comply with the laws relating to accessibility as such laws existed at the time the contract was entered into.

8. All buildings subject to this section which may be frequented, lived in, or worked in by the public shall comply with this section.

ACCESSIBLE ELEMENTS AND SPACES

BASIC COMPONENTS (ANSI A117.1, 4.1, 1986)

Accessible sites, facilities, and buildings, including public-use, employee-use, and common-use spaces in housing facilities, shall provide accessible elements and spaces as identified in Table 1.

SPACE ALLOWANCES AND REACH RANGES (ANSI A117.1, 4.2, 1986)

Wheelchair Passage Width.
The minimum clear width for single wheelchair passage shall be 32 inches at a point and 36 inches continuously (see Figures 1 and 27).

Special Note: Although people who use walking aids can maneuver through clear width openings, they need passageways and walks that are 36 inches wide for comfortable gaits. Crutch tips, often extending down at a wide angle, are a hazard in narrow passageways where they might not be seen by other pedestrians. Thus, the 36 inch width provides a safety allowance both for the disabled person and for others.

Width for Wheelchair Passing.
The minimum width for two wheelchairs to pass is 60 inches (see Figure 2).

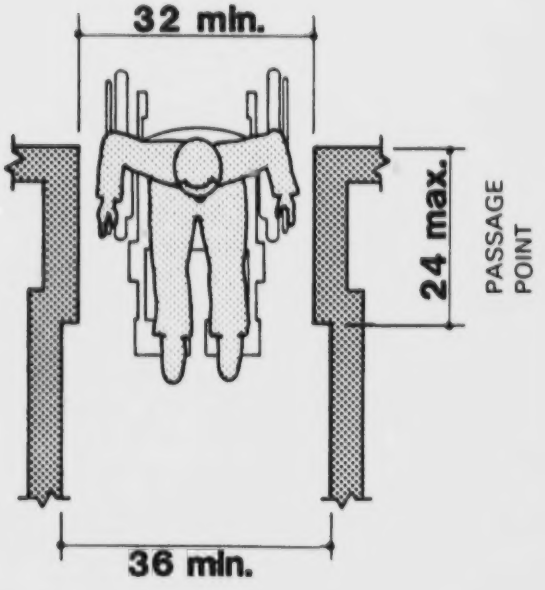


FIG. 1

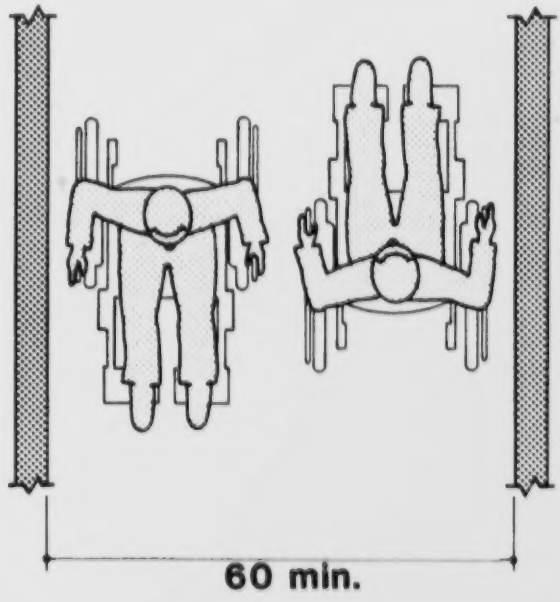


FIG. 2

TABLE 1

Basic Components for Accessible Sites, Facilities, and Buildings

1.	Accessible route(s)	Within the boundary of the site A. From public transportation stops, accessible parking spaces, accessible passenger loading zones, and public streets or sidewalks to accessible building entrance B. Connecting accessible buildings, facilities, elements and spaces that are on the same site C. Connecting accessible building or facility entrances with accessible spaces and elements within the building or facility
2.	Protruding objects	Accessible routes or maneuvering space including, but not limited to, halls, corridors, passageways, or aisles
3.	Ground and floor surface treatment	Accessible routes, rooms, and spaces, including floors, walks, ramps, stairs, and curb ramps
4.	Parking and passenger-loading zones	If provided at the site
5.	Curb ramps	Accessible routes crossing curbs
6.	Ramps	Accessible routes with slopes greater than 1:20
7.	Stairs	Stairs on accessible routes connecting levels not connected by an elevator

8. Elevator	Accessible routes connecting different accessible levels, as provided and/or where required
9. Platform Lift	May be used in lieu of an elevator or ramp under certain conditions
10. Windows	If windows are intended to be operated by the occupant
11. Doors	Accessible entrances, accessible spaces, accessible routes
12. Entrances	When part of accessible routes. Generally, one or more accessible entrances will serve transportation facilities, passenger loading zones, parking facilities, taxi stands, public streets and sidewalks, and interior vertical access
13. Drinking fountains and water coolers	If provided in the facility or at the site
14. Toilet rooms and bathing facilities including water closets, toilet rooms, and stalls, urinals, lavatories and mirrors, bathtubs, shower stalls, and sinks.	Public-use and common-use facilities
15. Storage facilities including cabinets, shelves, closets, and drawers	If provided in accessible space.
16. Grab bars, tub and shower seats	Accessible toilet and bathing facilities
17. Controls and operating mechanism	Accessible space, accessible routes, or as parts of accessible elements

18. Alarms, emergency warning systems	If provided in the facility or at the site
19. Tactile warnings	Doors to hazardous areas
20. Signs	Rooms and spaces, emergency information or general circulation direction
21. Public telephones	If provided in the facility or at the site
22. Seating, tables, or work surfaces	If provided in accessible spaces
23. Places of assembly	If provided in the facility or at the site
24. Public-use spaces	Building and facilities, including housing
25. Employee-use spaces and facilities	Buildings and facilities, including housing
26. Common-use spaces and facilities. Including, swimming pools, playgrounds, entrances, rental offices, lobbies, elevators, mailbox areas, lounges, halls, corridors, and the like	Buildings and facilities including housing

Wheelchair Turning Space.

The space required for a wheelchair to make a 180-degree turn is a clear space of 60 inches diameter (see Figure 3) or a T-shaped space (see Figure 4).

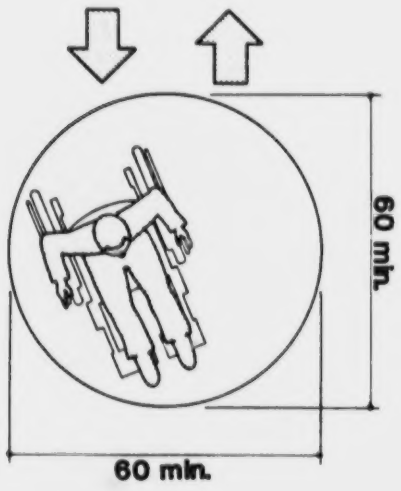
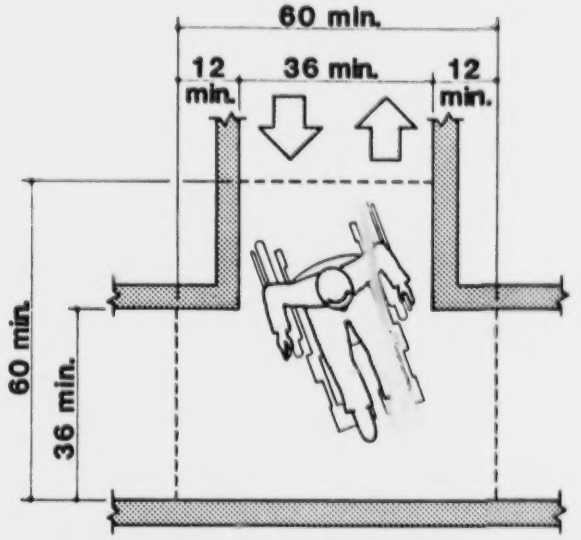


FIG.3



NOTE: Dashed lines indicate minimum length of clear space required on each arm of the T-shaped space in order to complete the turn.

FIG. 4

Clear Floor or Ground Space for Wheelchairs

Size and Approach.

The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30 inches by 48 inches(see Figure 5).

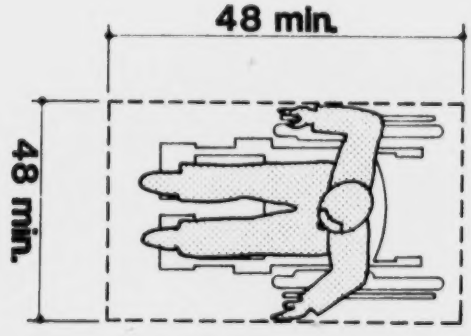


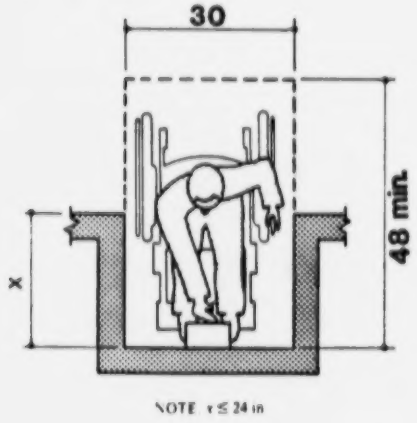
FIG. 5

Relationship of Maneuvering Clearances to Wheelchair Spaces.

One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair clear floor space. If a clear floor space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided as shown in Figures 6 and 7.

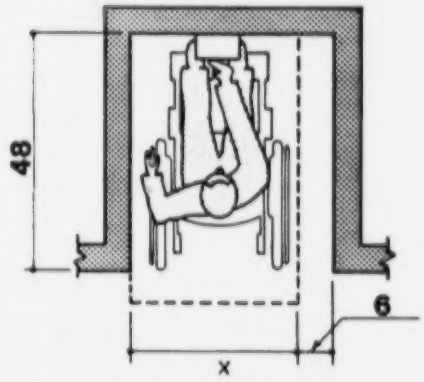
Special Note: 1. Clear floor or ground space for wheelchairs may be part of the knee or toe space required under some objects.

2. Alcoves intended for forward approach, which are deeper than 24 inches shall have an additional 6 inches of width (total of 30 inches) to allow for maneuvering clearances. Alcoves intended for parallel approach, which are deeper than 15 inches, shall have an additional 12 inches of width (total of 60 inches) to allow for maneuvering clearances.



NOTE: x ≤ 24 in

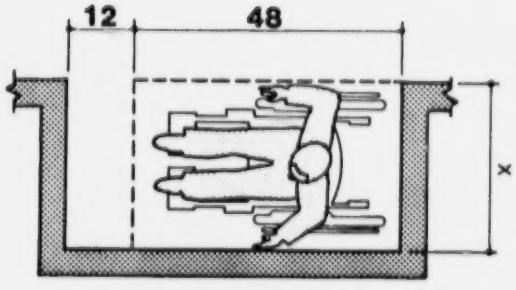
(a)



NOTE: If x > 24 in, then an additional maneuvering clearance of 6 in shall be provided as shown.

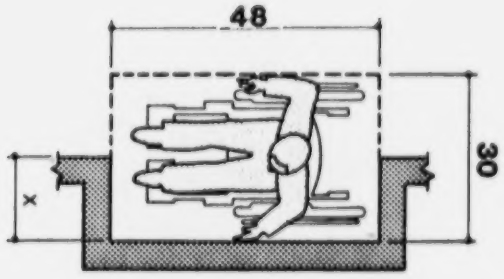
(b)

FIG. 6



NOTE: x ≤ 15 in

(a)



NOTE: If x > 15 in, then an additional maneuvering clearance of 12 in shall be provided as shown.

(b)

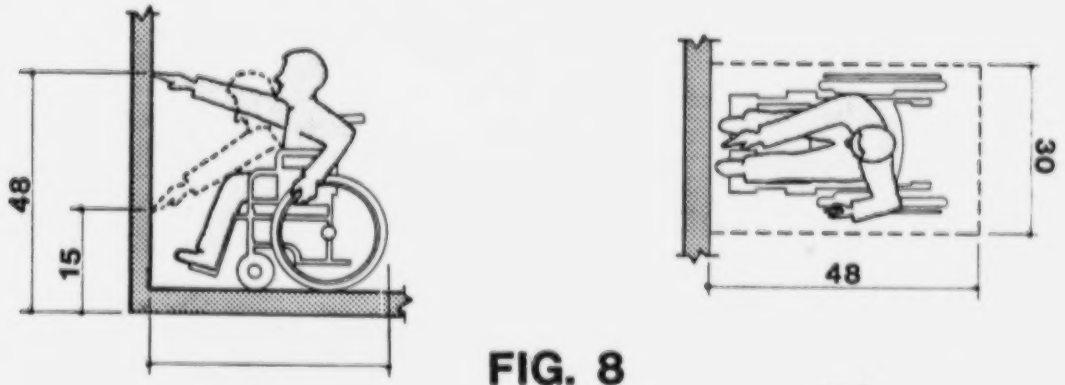
FIG. 7

Surfaces of Wheelchair Spaces.

Clear floor or ground spaces for wheelchairs shall comply with the requirements found in *Ground and Floor Surfaces* section of this manual.

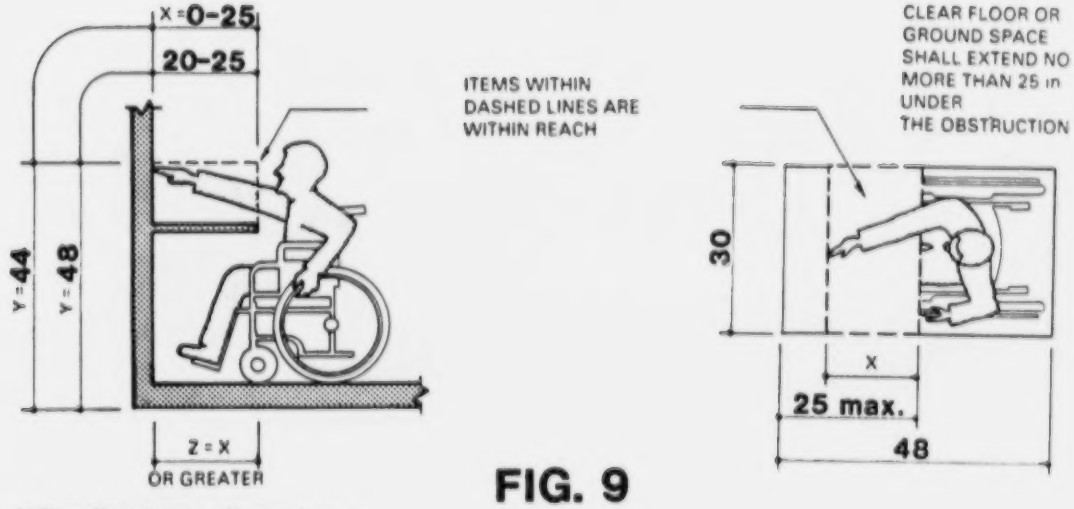
Forward Reach.

If the clear floor space allows only forward approach to an object, the maximum high forward reach allowed shall be 48 inches and the minimum low forward reach shall be unobstructed and no less than 15 inches above the floor (see Figure 8). If the high forward reach is over an obstruction, reach and clearances shall be as shown in Figure 9).



(a) (b)

FIG. 8



NOTE: x = Reach distance, y = Maximum height, z = Clear knee space. z is the clear space below the obstruction, which shall be at least as deep as the reach distance, x.

(a) (b)

FIG. 9

Side Reach. If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54 inches and the low side reach shall be no less than 9 inches above the floor (Figures 10 and 11). If the side reach is over an obstruction, the reach and clearances shall be as shown in Figure 12.

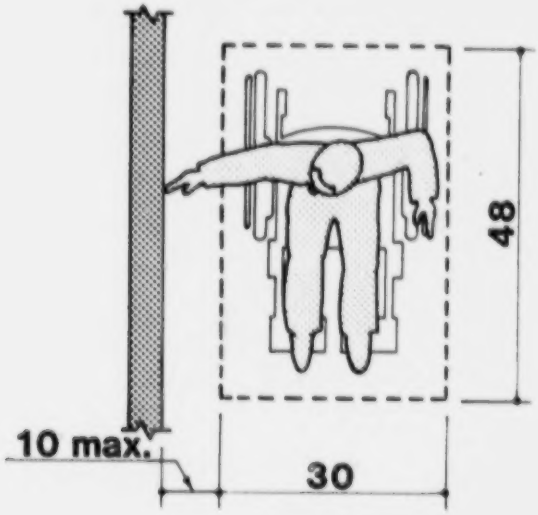


FIG. 10

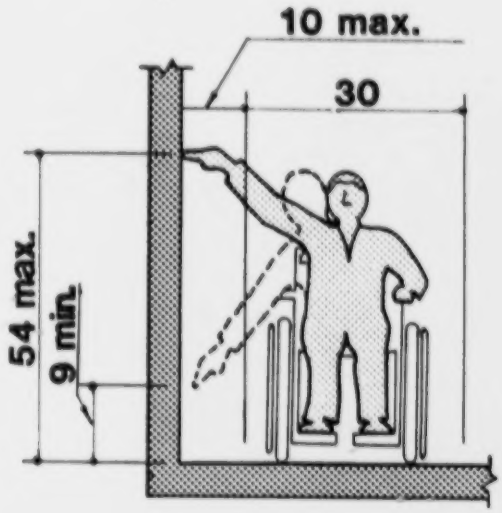


FIG. 11

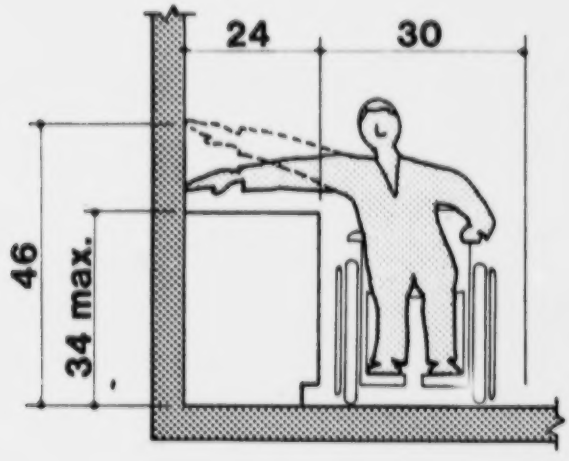


FIG. 12

ACCESSIBLE ROUTE (ANSI A117.1, 4.3, 1986 and Subsections 553.48(4)(b,c,& d), and 553.48(4)(j,1-5), F. S.)

General.

All walks, halls, corridors, aisles, and other spaces that are part of an accessible route shall comply with the requirements of this section.

Special Note: Many disabled people can move at only very slow speeds. On trips over 100 feet, disabled people are apt to rest frequently, which substantially increases their trip times. In inclement weather, slow progress and resting can greatly increase a disabled person's exposure to the elements.

Level indirect routes or those with running slopes lower than 1:20 can sometimes provide more convenience than direct routes with maximum allowable slopes or with ramps.

Location.

1. Accessibility to buildings shall be provided from rights-of-way and parking areas by means of walks, curb-cuts, or ramps to at least one entrance generally used by the public and from such entrance to elevators, if any. Such pathways shall be at least 44 inches wide and shall be devoid of stairs/steps or other abrupt change in elevation greater than 1/2 inch.

2. Accessibility in buildings shall be provided at each floor and accessible grade level, except as otherwise provided in this section.

3. Accessible routes within the boundary of the site shall be provided from public transportation stops, accessible parking and accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance they serve.

4. Accessible routes shall connect accessible buildings, facilities, elements, and spaces that are on the same site.

5. Accessible routes shall connect accessible building or facility entrances with all accessible spaces and elements and with all accessible dwelling units within the building or facility.

6. Accessible routes shall connect accessible entrances of each accessible dwelling unit with those exterior and interior spaces and facilities that serve the accessible dwelling unit.

Width.

The minimum clear width of an accessible route shall be 36 inches except at doors (see *Doors - Clear Width* section of this manual). If a person in a wheelchair must make a turn around an obstruction, the minimum clear width of the accessible route shall be as shown in Figures 13 and 14.

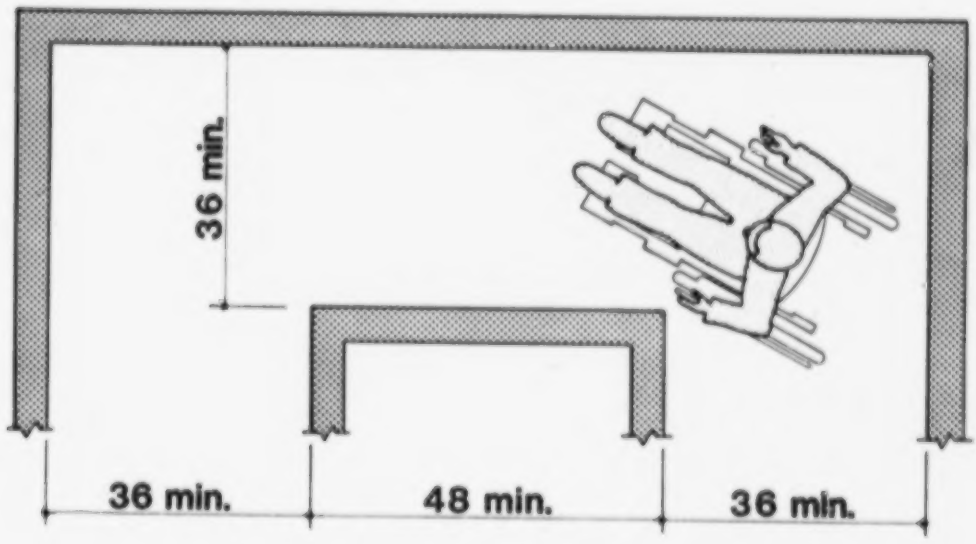
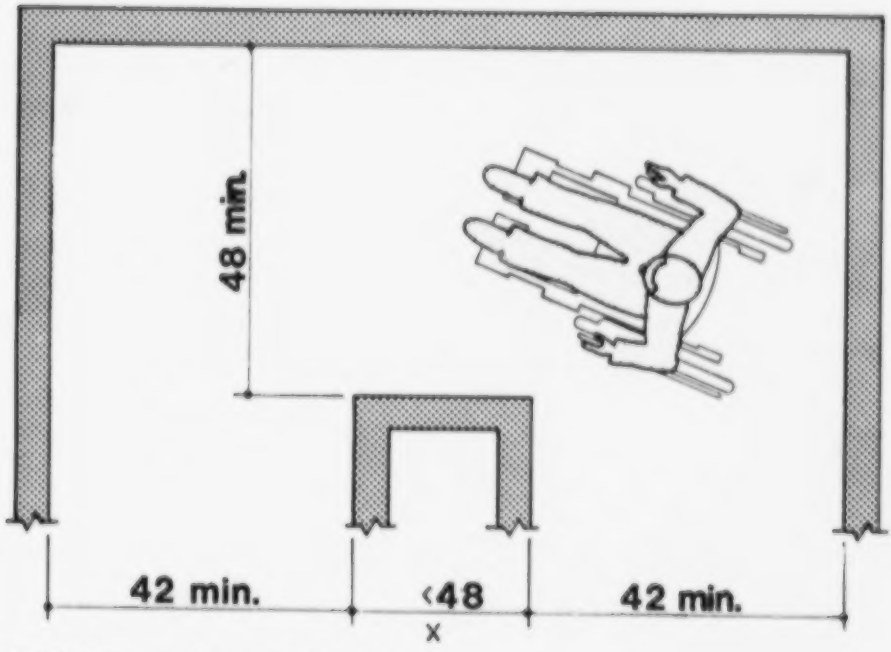


FIG. 13



NOTE: Dimensions shown apply when $x < 48$ in

FIG. 14

Passing Space.

If an accessible route has less than 60 inches clear width, then passing spaces at least 60 inches by 60 inches shall be located at reasonable intervals not to exceed 200 feet. An intersection of two corridors or walks shall also be considered a passing space.

Headroom.

Accessible routes shall comply with *Protruding Objects - Headroom* section of this manual.

Surface Texture.

The surface of an accessible route shall comply with *Ground and Floor Surfaces* section of this manual. Floors shall have a slip-resistant finish.

Slope.

An accessible route with a running slope greater than 1:20 is a ramp and shall comply with *Ramps* section of this manual. Nowhere shall the cross slope of an accessible route exceed 1:50.

Changes in Level.

Changes in level along an accessible route shall comply with *Ground and Floor Surfaces - Changes in Level* section of this manual. If an accessible route has changes in level greater than 1/2 inch, then a curb ramp, ramp, elevator, or platform lift shall be provided that complies with *Curb Ramps, Ramps,* or *Elevators* section of this manual, respectively.

Doors.

Doors that are part of an accessible route shall comply with *Doors* section of this manual.

Corridors.

1. Interior corridors shall conform to all applicable requirements and shall be at least 44 inches wide when part of a required means of egress. Other interior aisles, corridors, and hallways shall be at least 36 inches wide.

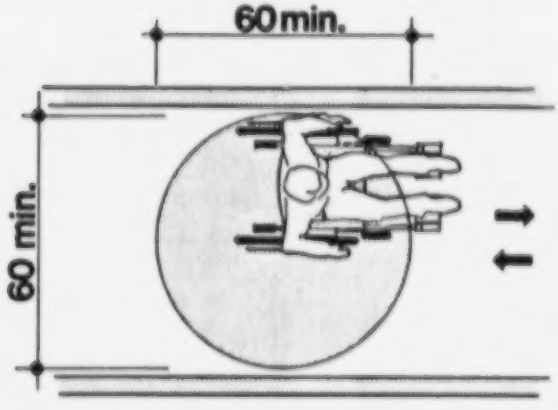


FIG. 15

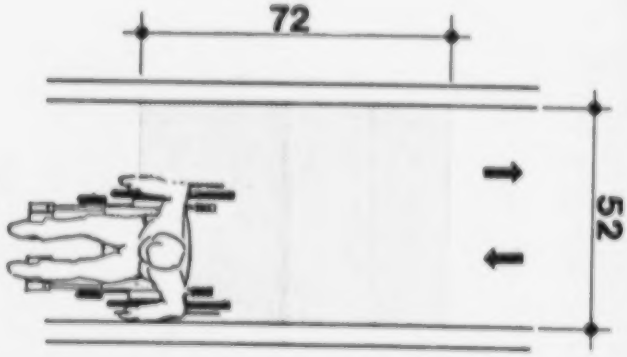


FIG. 16

2. Where the configuration of a corridor, aisle, or hallway requires the making of 180-degree turns, accessibility shall be provided by a space of at least 60 inches in diameter, a space of at least 52 inches by 72 inches (see Figures 15 and 16), or an alternate configuration as set forth in American National Standards Institute specification A117.1 (1986),(see Figure 4 on page 5).

Special Note: The Life Safety Code, NFPA 101 takes precedence in case of any code conflict.

Egress.

Accessible routes serving any accessible space or element shall also serve as a means of egress for emergencies or connect to an accessible place of refuge. Such accessible routes and places of refuge shall comply with the requirements established by the administrative authority having jurisdiction.

Pedestrian Control Devices.

1. Except as otherwise provided in this subsection, posts, bars, railings, and other similar barricades or pedestrian control devices shall not be placed in the common or emergency entranceways or exitways of buildings or in the exterior sidewalks, walkways, or other public paths serving them which are located on private property.

2. Interior or exterior turnstiles (see *Doors - Revolving Doors and Turnstiles* section of this manual).

3. For new construction permits issued after January 1, 1995, one check-out aisle must have 32 inches of clear passage and all other check-out aisles shall have 29 inches of clear passage .

4. For remodeling or new construction permits issued after July 1, 1990, two check-out aisles must have 32 inches of clear passage. This shall not apply to any stores built after January 1, 1995 (see Figure 17).

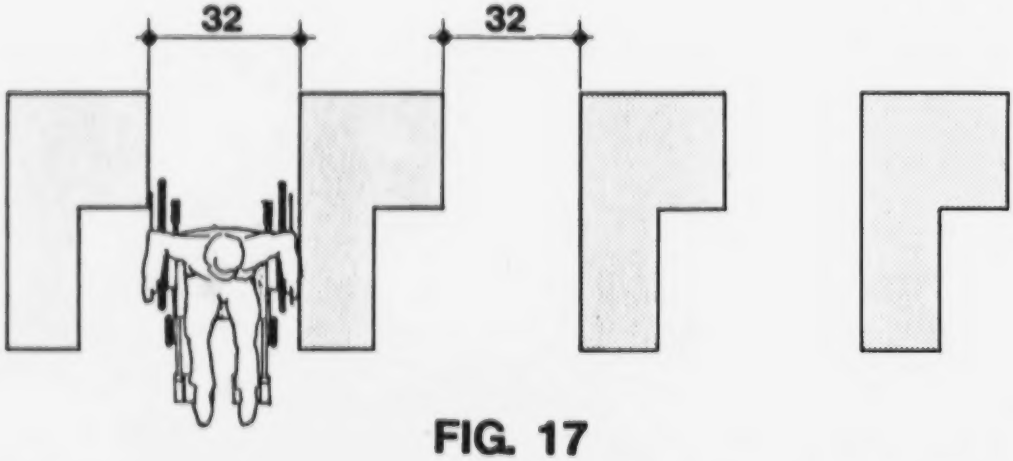


FIG. 17

5. Any store with less than 4 check-out aisles shall have one check-out station with at least 32 inches of clear passage.

WALKWAYS (Subsection 553.48(4)(e), F. S.)

Location.
All requirements contained herein for walkways pertain only to such features when located on privately owned property.

Width.
Walkways shall be at least 48 inches wide. Where doors swing out over a continuous walkway which runs perpendicular to the path of egress, the walkway shall be at least 60 inches wide (see Figure 18).

Special Note: Additional length of the 60 inch wide walkway should be sufficient to allow wheelchair passage beyond the swing of the door.

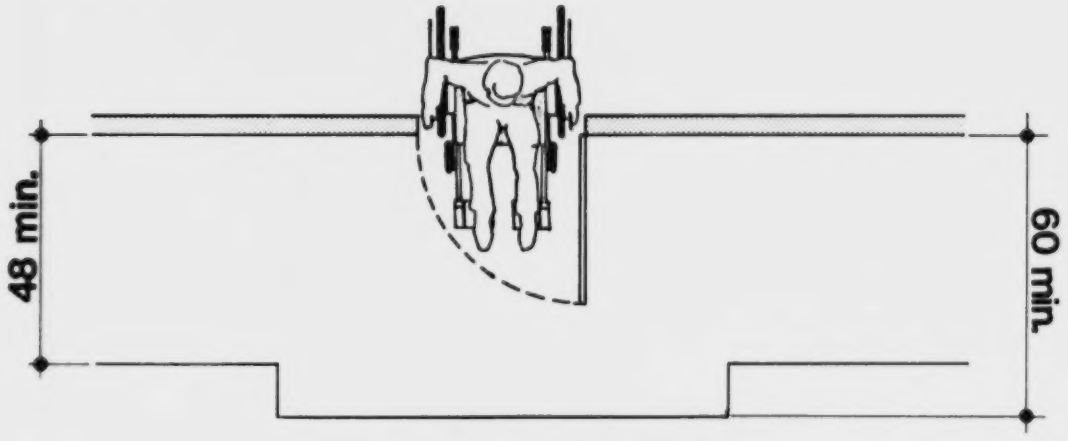


FIG. 18

Changes in Level.
Walkways shall be of a continuing common plane not interrupted by steps or abrupt changes in level.

Platforms.
Walkways that are grade level leading to entrance doors shall have a level platform of at least 60 inches by 60 inches if the door swings out. The platform shall extend at least 24 inches beyond the latch side of the door (see Figure 19). Above grade level, platforms shall have security rails or walls. If the door swings in, the platform shall be at least 60 inches wide by 36 inches deep (see Figure 20).

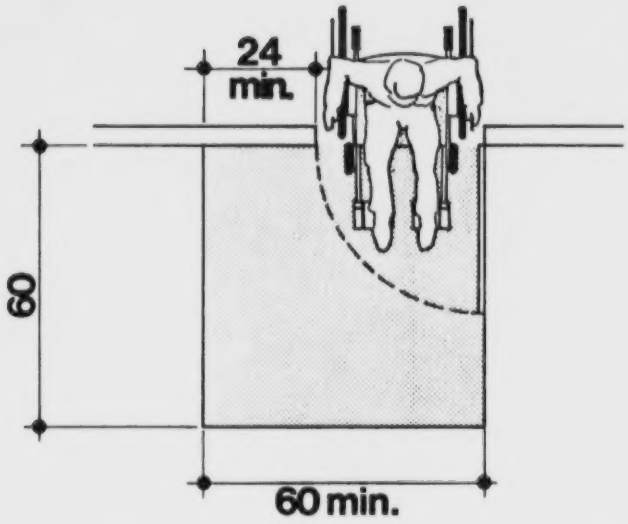


FIG. 19

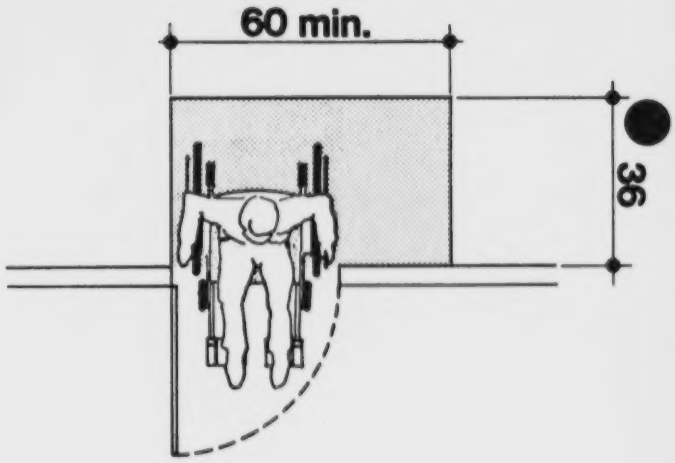


FIG. 20

PROTRUDING OBJECTS (ANSI A117.1, 4.4, 1986)

General.

Objects projecting from walls (for example, telephones) with their leading edges between 27 inches and 80 inches above the finished floor shall protrude no more than 4 inches into walks, halls, corridors, passageways, or aisles (see Figure 21). Objects mounted with their leading edges at or below 27 inches above the finished floor may protrude any amount (see Figures 22 and 23). Free-standing objects mounted on posts or pylons may overhang 12 inches maximum from 27 inches to 80 inches above the ground or finished floor (see Figures 25 and 26). Protruding objects shall not reduce the clear width required for an accessible route or maneuvering space (see Figure 24).

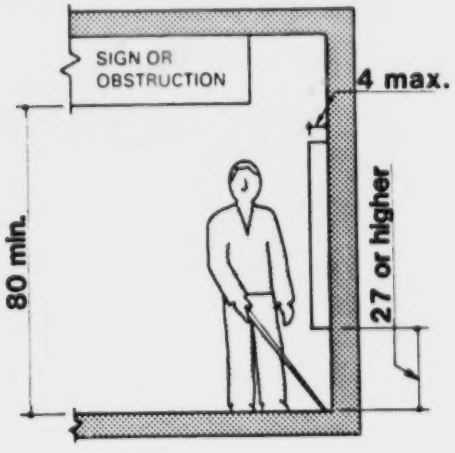


FIG. 21

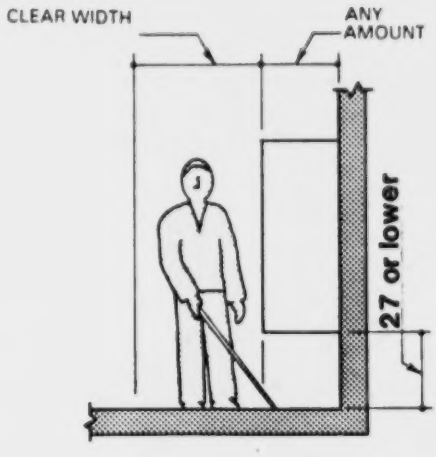


FIG. 22

Special Note: Most people with severe impairments of vision use the long cane as an aid to mobility. The two principal cane techniques are the touch technique, where the cane arcs from side to side and touches points outside both shoulders; and the diagonal technique, where the cane is held in a stationary position diagonally across the body with the cane tip touching or just above the ground at a point outside one shoulder and the handle or grip extending to a point outside the other shoulder. The touch technique is used primarily in uncontrolled areas, while the diagonal technique is used primarily in certain limited, controlled, and familiar environments.

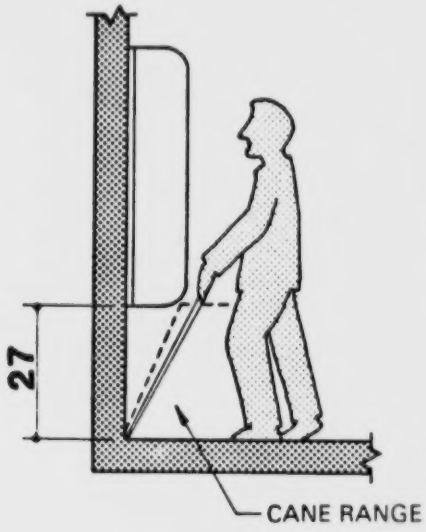


FIG. 23

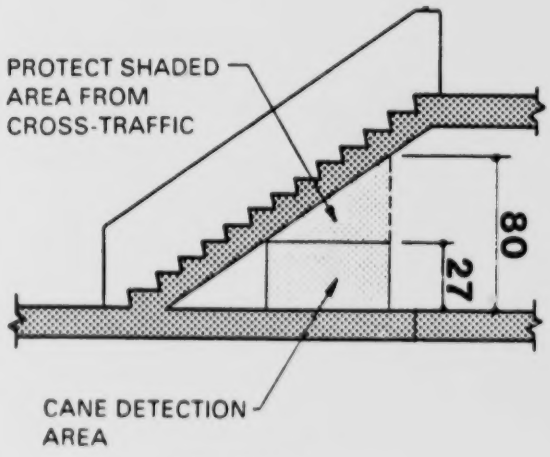
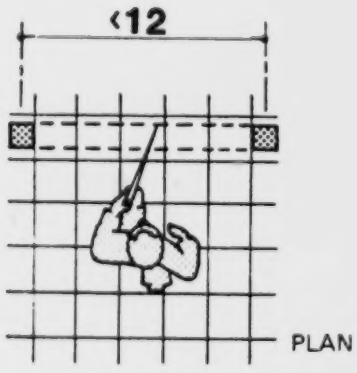
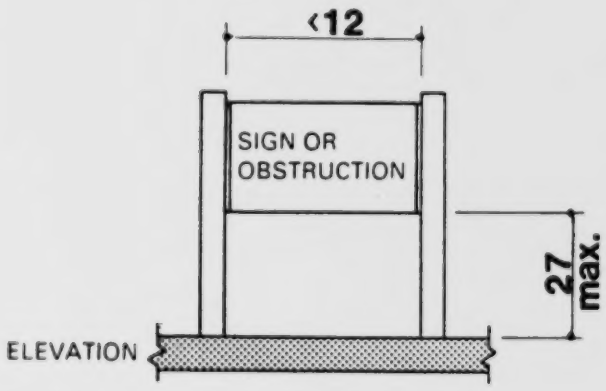


FIG. 24



(a)



(b)

FIG. 25

Headroom.

Walks, halls, corridors, passageways, aisles, or other circulation spaces shall have 80 inches minimum clear headroom (see Figure 21). If vertical clearance of an area adjoining an accessible route is reduced to less than 80 inches nominal dimension, a guardrail or other barrier having its leading edge at or below 27 inches above the finished floor shall be provided (see Figure 29).

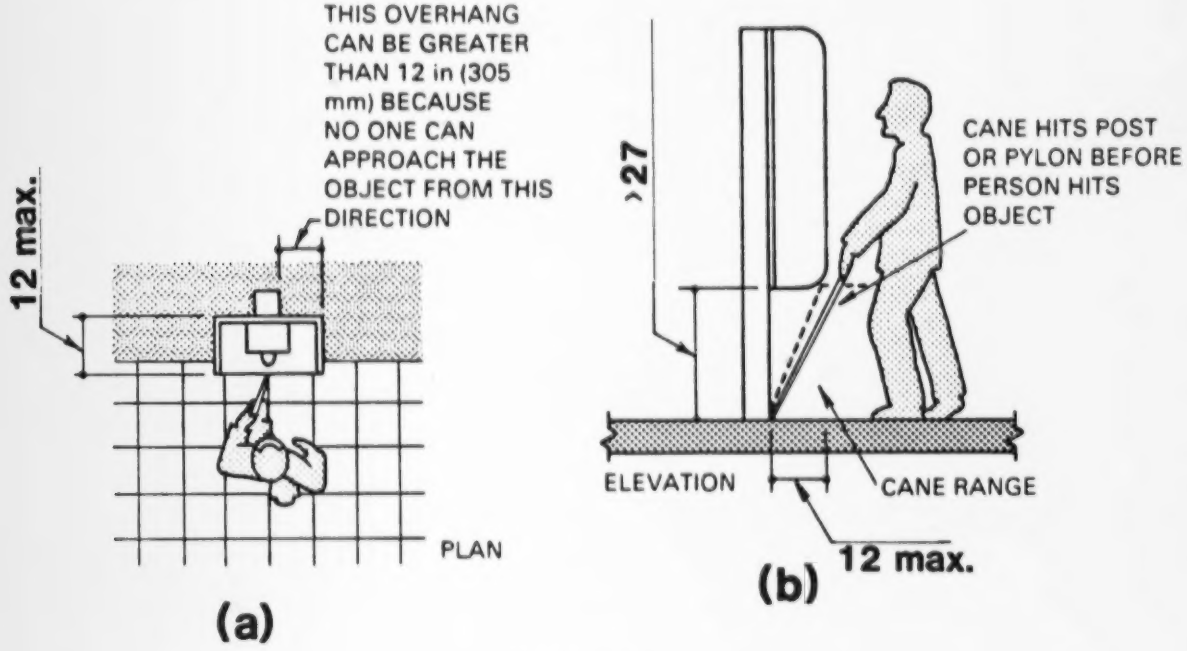

THIS OVERHANG CAN BE GREATER THAN 12 in (305 mm) BECAUSE NO ONE CAN APPROACH THE OBJECT FROM THIS DIRECTION
12 max.
PLAN
(a)
>27
CANE HITS POST OR PYLON BEFORE PERSON HITS OBJECT
ELEVATION
CANE RANGE
12 max.
(b)

FIG. 26

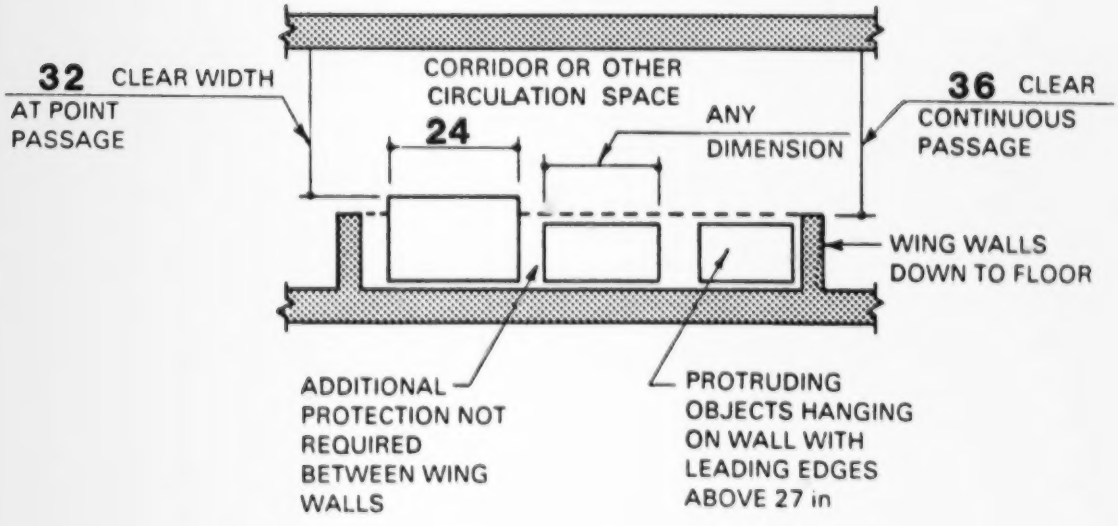

32 CLEAR WIDTH AT POINT PASSAGE
CORRIDOR OR OTHER CIRCULATION SPACE
24
ANY DIMENSION
36 CLEAR CONTINUOUS PASSAGE
WING WALLS DOWN TO FLOOR
ADDITIONAL PROTECTION NOT REQUIRED BETWEEN WING WALLS
PROTRUDING OBJECTS HANGING ON WALL WITH LEADING EDGES ABOVE 27 in

FIG. 27 30

GROUND AND FLOOR SURFACES (ANSI A117.1, 4.5, 1986 and Subsection 553.48(4)(d), F. S.)

General.

Ground and floor surfaces along accessible routes and in accessible rooms and spaces, including floors, walks, ramps, stairs, and curb ramps, shall be stable, firm, shall have a slip resistant finish, and shall comply with *Ground and Floor Surfaces* section of this manual.

Changes in Level.

Changes in level up to 1/4 inch may be vertical and without edge treatment. Changes in level between 1/4 inch and 1/2 inch shall be beveled with a slope no greater than 1:2 (see Figures 28 and 29). Changes in level greater than 1/2 inch shall be accomplished by means of a ramp that complies with *Curb Ramps and Ramps* sections of this manual.

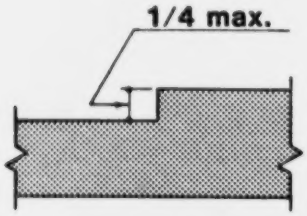


FIG. 28

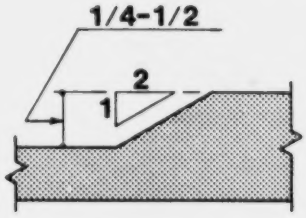


FIG. 29

Carpet.

If carpet or carpet tile is used on a ground or floor surface, then it shall be securely attached; have a firm cushion, pad, or backing or no cushion or pad; and have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. The maximum pile height shall be 1/2 inch. Exposed edges of carpet shall be fastened to floor surfaces and have trim along the entire length of the exposed edge. Carpet edge trim shall comply with *Changes in Level* section of this manual.

Gratings.

If gratings are located in walking surfaces, then they shall have spaces no greater than 1/2 inch wide in one direction. If gratings have elongated openings, then they shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

PARKING SPACES AND PASSENGER LOADING ZONES. (ANSI A117.1, 4.6, 1986 and Subsections 316.1955(2)(c)&(3) and 316.1956(1&2), F. S.) (Additional statutes dealing with parking requirements can be found in the appendix.)

General.

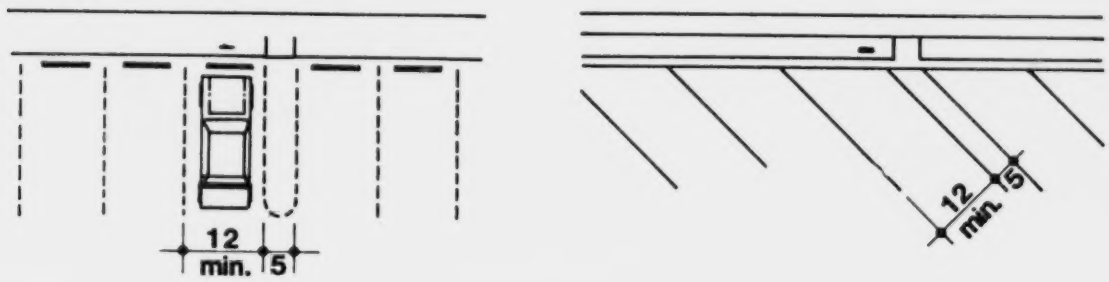
Accessible parking spaces shall comply with *Parking Spaces* section of this manual. Accessible passenger loading zones shall comply with *Passenger Loading Zones* section of this manual.

Parking spaces designated for physically handicapped people and accessible passenger loading zones that serve a particular building shall be located on the shortest possible accessible circulation route to an accessible entrance of the building. In separate parking structures or lots that do not serve a particular building, parking spaces for physically handicapped people shall be located on the shortest possible circulation route to an accessible pedestrian entrance of the parking facility.

Parking Spaces.

1. Any commercial real estate property owner offering parking for the general public shall provide specially designed and marked motor vehicle parking spaces for the exclusive use of physically disabled persons who have been issued parking permits pursuant to Sections 316.1958 320.0842, 320.0843, 320.0845 or 320.0848, F. S.

2. Diagonal or perpendicular parking spaces shall be a minimum of 12 feet wide (see Figure 30).



(a) Perpendicular (b) Diagonal

FIG. 30

3. Parallel parking spaces shall be located either at the beginning or end of a block or adjacent to alley entrances (see Figure 31). Curbs adjacent to such spaces shall be of a height which will not interfere with the opening and closing of motor vehicle doors.

FIG. 31

4. Each such parking space shall be conspicuously outlined in blue paint, and shall be posted and maintained with a permanent, above-grade sign bearing the international symbol of accessibility or the caption "PARKING BY DISABLED PERMIT ONLY," or bearing both such symbol and caption (see Figure 32). Such signs shall not be obscured by a vehicle parked in the space. All handicapped parking spaces must be signed and marked in accordance with the standards adopted by the Department of Transportation.

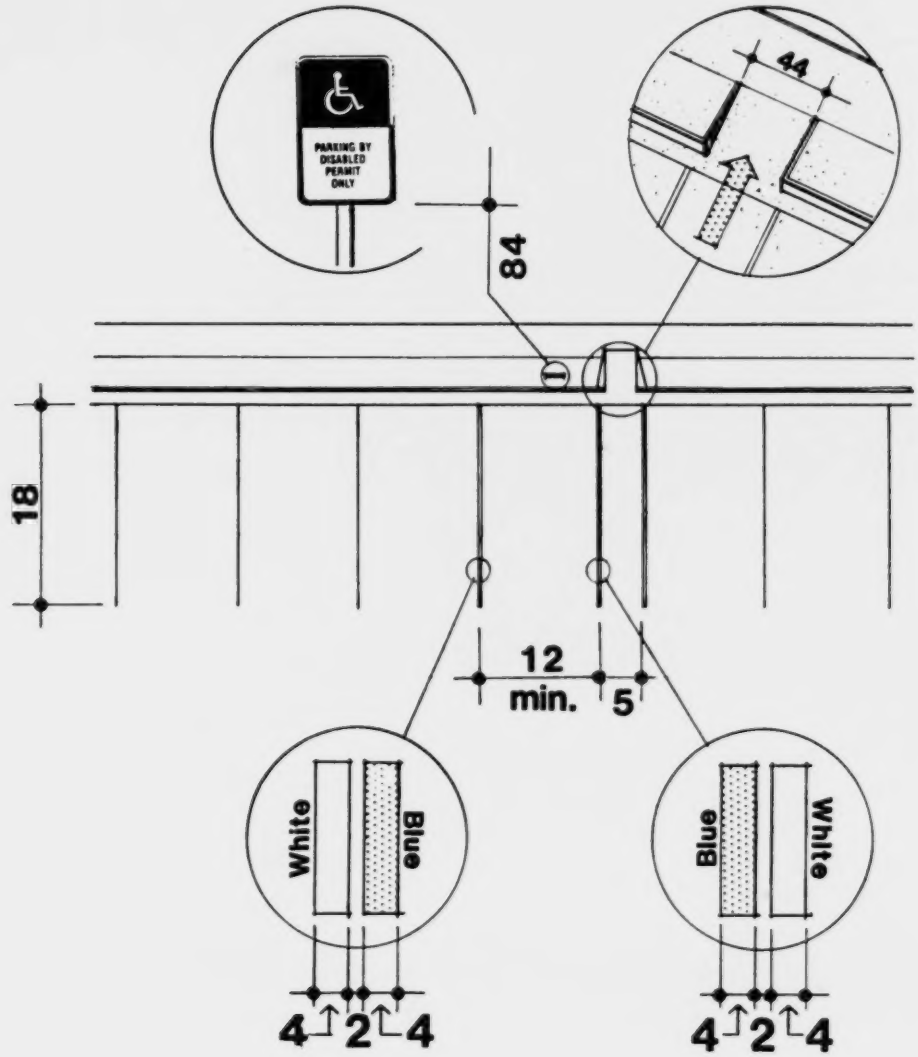


FIG. 32

5. All spaces shall have an adjacent access aisle 60 inches wide minimum (see Figure 30). Parking access aisles shall be part of the accessible route to the building or facility entrance and shall comply with *Accessible Route* section of this manual. Two accessible parking spaces may share a common access aisle. Parked vehicle overhangs shall not reduce the clear width of an accessible circulation route.

6. All spaces shall have accessible thereto a curb-ramp or curb-cut, when necessary to allow access to the building served, and shall be located so that users will not be compelled to wheel behind parked vehicles.

7. The minimum number of such parking spaces shall comply with the following table:

Total Parking in Lot	**Required Number of Accessible Spaces**
Up to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2% of Total
Over 1000	20 plus 1 for each 100 over 1000

Passenger Loading Zones.

Passenger loading zones shall provide an access aisle at least 48 inches wide and 20 feet long adjacent and parallel to the vehicle pull-up space (see Figure 33). If there are curbs between the access aisle and the vehicle pull-up space, then a curb ramp complying with *Curb Ramp* section of this manual shall be provided.

A minimum vertical clearance of 108 inches shall be provided at accessible passenger loading zones and along vehicle access routes to such areas from site entrances.

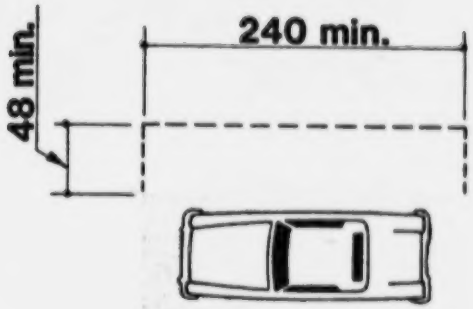


FIG. 33

CURB RAMPS (ANSI A117.1, 4.7, 1986 and Subsection 553.48(4)(g), F. S.)

Location.

Curb ramps complying with *Curb Ramps* section of this manual shall be provided wherever an accessible route crosses a curb. Ramps or curb-cuts from parking areas that are privately owned, to the walkway level, shall be provided and if more than one is provided, shall be spaced along such walkways at intervals of no more than 100 feet and such ramps or curb-cuts shall be located as close as practical to main entrances and exits to buildings.

All requirements contained herein for curb-cuts pertain only to such features when located on privately owned property.

Slope.

Slopes of curb ramps shall comply with *Slope and Rise* section of this manual. The slope shall be measured as shown in Figure 34. Maximum counterslopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp or accessible route shall not exceed 1:20. Curb-cuts used in lieu of ramps shall have a maximum rise of 8 inches.

FIG. 34

Width.

The minimum width of a curb ramp shall be 44 inches, exclusive of flared sides.

Surface.

Surfaces of curb ramps shall comply with *Ground and Floor Surfaces* section of this manual.

Sides of Curb Ramps.

If a curb-cut is located where pedestrians must walk across it, it shall have flared sides (see Figure 35(a). The maximum slope of the flare shall not exceed 1 inch vertically for each 10 inches horizontally with respect to inclined curbs, or 1 inch vertically for each 12 inches horizontally for built-up curbs. Curb ramps with returned curbs may be used where pedestrians would not normally walk across the ramp (see Figure 35(b).

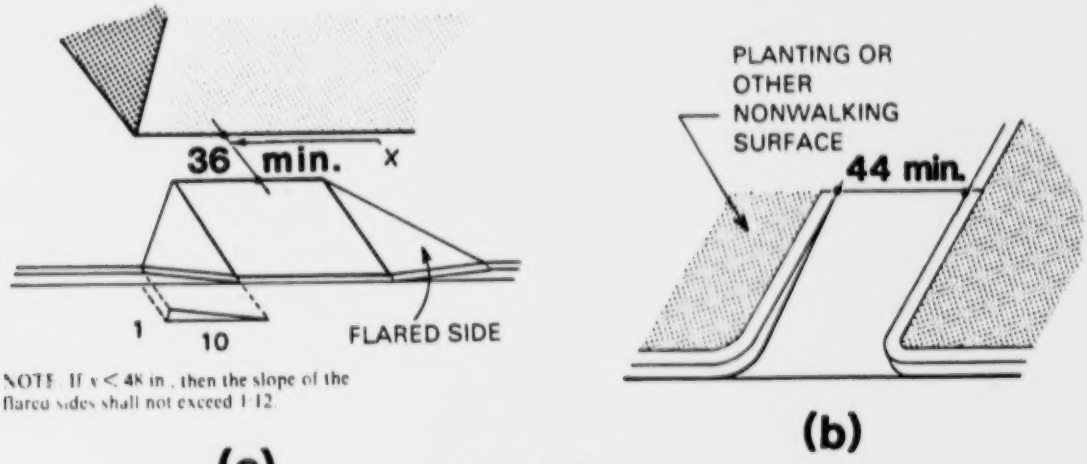


FIG. 35

Built-Up Curb Ramps.

Built-up curb ramps shall be located so that they do not project into vehicular traffic lanes (see Figure 36).

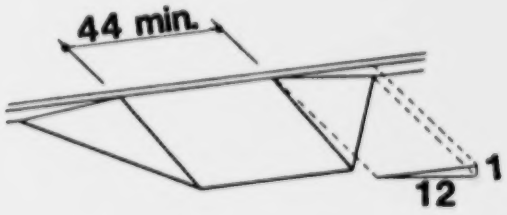


FIG. 36

Platforms.

Curb-cuts shall have a level platform at the top of at least 36 inches by 36 inches.

Warning Textures.

A curb ramp shall have a detectable warning texture complying with *Detectable Warnings* section of this manual and extending the full width and depth of the curb ramp, including any flares (see Figure 37).

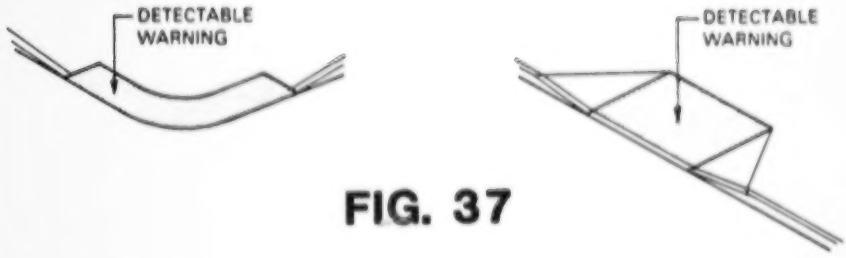
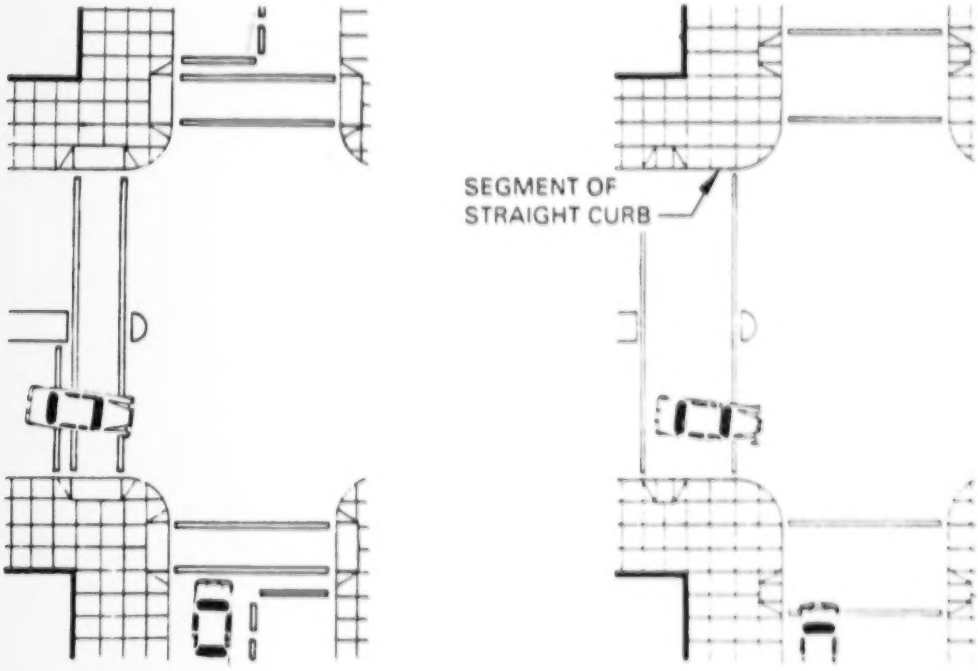


FIG. 37

Obstructions.
Curb ramps shall be located or protected to prevent their obstruction by parked vehicles.

Location at Marked Crossings.
Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides (see Figure 38).

Diagonal Curb Ramps.
If diagonal (or corner-type) curb ramps have returned curbs or other well-defined edges, such edges shall be parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have 48 inches minimum clear space as shown in Figures 38(c) and (d). If diagonal curb ramps are provided at marked crossings, the 48 inch clear space shall be within the markings (see Figures 38(a) and (b). If diagonal curb ramps have flared sides, they shall also have a segment of straight curb at least 24 inches long located on each side of the curb ramp and within the marked crossing (see Figure 38(c).



(a) (b)

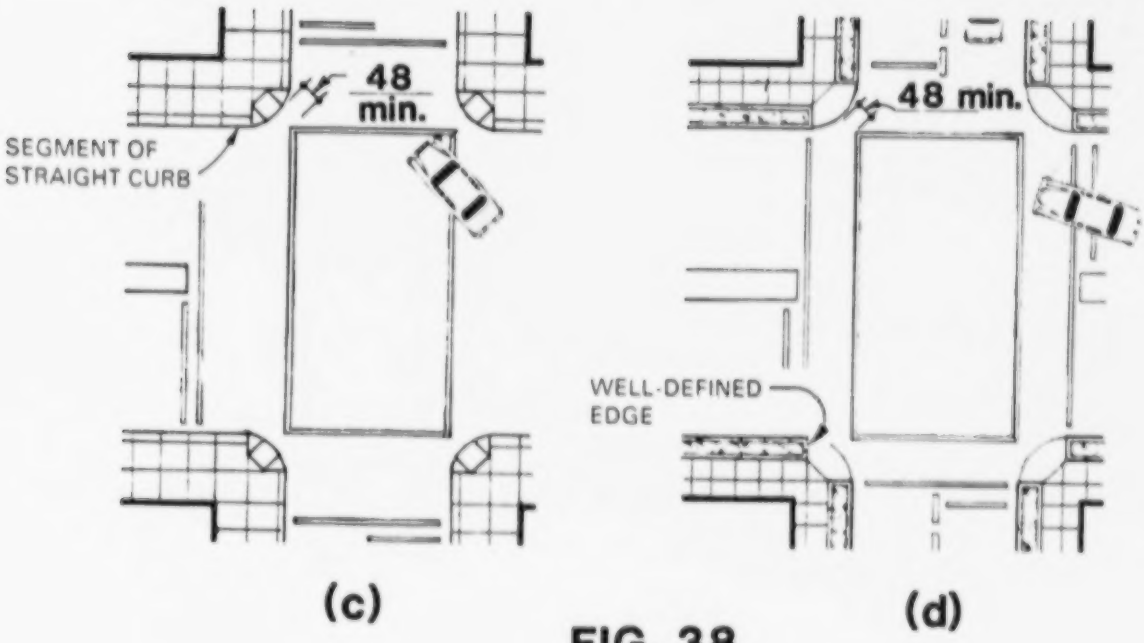


FIG. 38

Islands.

Any raised islands in crossings shall be cut through level with the street or have curb ramps at both sides and a level area at least 48 inches long in the part of the island intersected by the crossings (see Figures 39(a) and (b).

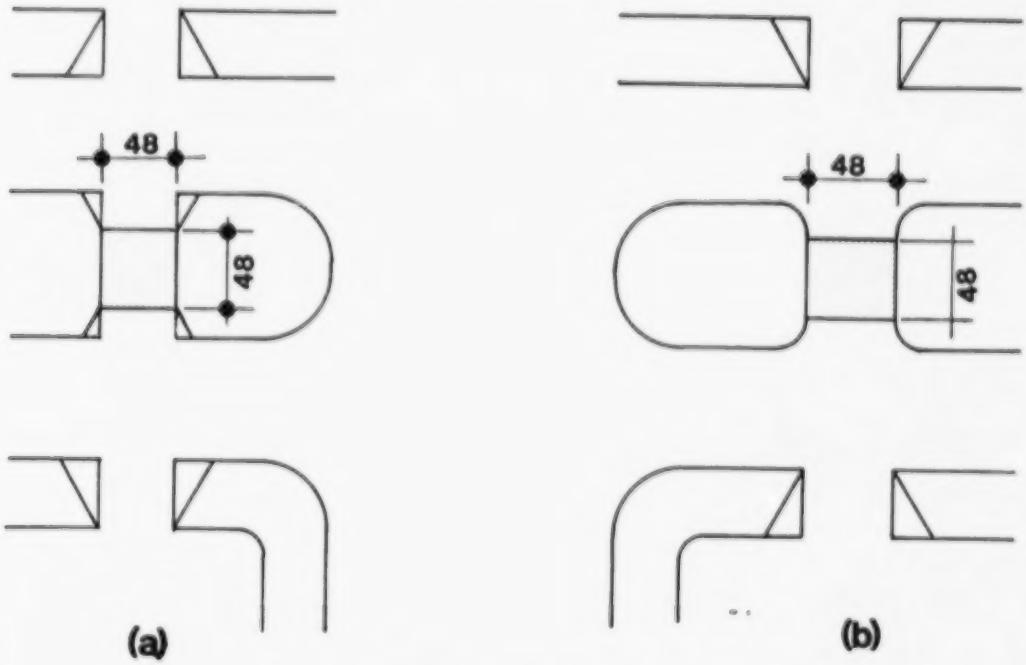


FIG. 39

Uncurbed Intersections.

If there is no curb at the intersection of a walk and an adjoining street, parking lot, or busy driveway, then the walk shall have a detectable warning texture complying with *Detectable Warnings at Hazardous Vehicular Areas* section of this manual at the edge of the vehicular way.

RAMPS (ANSI A117.1, 4.8 and Subsections 553.48(4)(f) & (g), F.S.)

General.

All floors on a particular story of a building shall be of a common level or be connected by a ramp or by inclined or vertical wheelchair lifts that are operable by a disabled person and conform to Chapter 399, Florida Statutes (see *Elevators* section of this manual).

Any part of an accessible route with a slope greater than 1:20 shall be considered a ramp and shall comply with *Ramps* section of this manual.

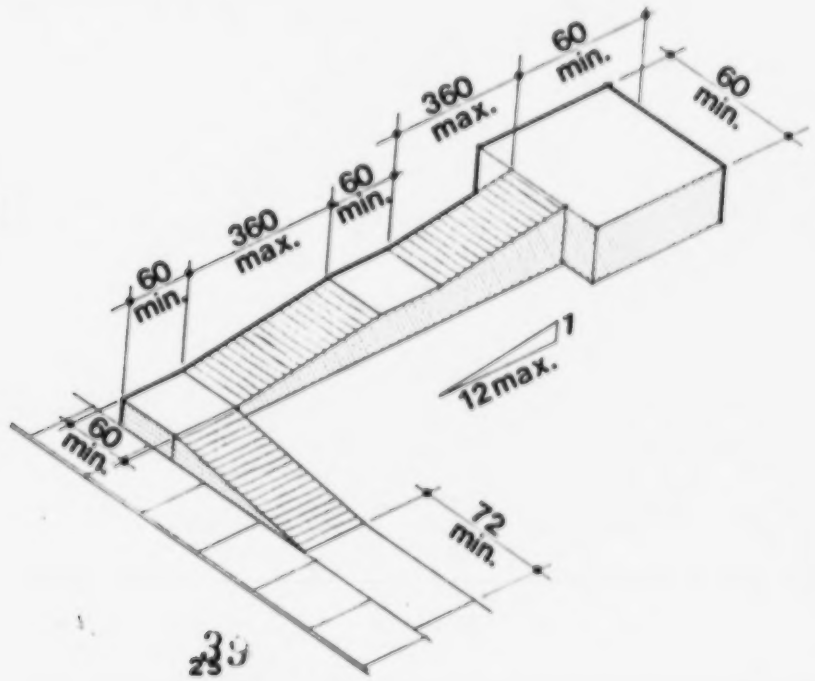
All requirements contained herein for ramps pertain only to such features when located on private property.

Special Note: Ramps are essential for wheelchair users if elevators or lifts are not available to connect different levels. However, some people who use walking aids have difficulty with ramps and prefer stairs.

Slope and Rise.

The least possible slope shall be used for any ramp. The maximum slope of a ramp in new construction shall be 1:12. Ramps 30 feet in length or longer shall have a maximum gradient of 1:20 or the ramps shall have a level platform at least 60 inches deep in the direction of the ramp at 30-foot intervals and at changes in direction over 15 degrees and shall be of a slope of no more than 1:12.

FIG. 40



Special Note: The ability to manage an incline is related to both its slope and its length. Most ambulatory people and most people who use wheelchairs can manage a slope of 1:16. Many people cannot manage a slope of 1:12 for 30 feet.

Surface.

Ramps shall have a slip-resistant surface and comply with *Ground and Floor Surfaces* section of this manual.

Width.

Ramps that are part of a required means of egress or are used by handicapped persons shall be at least 44 inches wide.

Platforms.

Ramps shall have a level platform at the top which is at least 60 inches wide by 60 inches deep, except as specified in this section. If the door swings out onto the platform, the platform shall extend at least 24 inches beyond the latch side of the door. If the doors swing in, the level platform shall be at least 36 inches deep and 60 inches wide. All above-grade-level platforms shall have security rails or walls. The bottom of each ramp shall have at least 72 inches of straight and level clearance.

Handrails.

1. Ramps shall have smooth handrails on both sides which are 32 inches above the upper surface of the ramp, measured vertically to the top of the rail, allowing a variation of not more than 1/2 inch. Handrails on ramps shall be 1 1/2 inches round in outside diameter. Handrails that are not continuous between flights shall be extended horizontally at least 18 inches at the required height at the top and bottom landings if a guard or wall exists.

Special Note: The requirements for stair and ramp handrails in this standard are for adults. When children are principal users in a building or facility, a second set of handrails at an appropriate height can assist them and aid in preventing accidents.

2. Handrails may be located in a recess if the recess is a maximum of 3 inches deep and extends at least 18 inches above the top of the rail (see Figure 41(d).

3. Gripping surfaces shall be continuous, without interruption by newel posts, other construction elements, or obstructions.

4. A handrail and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch.

5. Handrails shall not be required on ramps 84 inches or less in length that are not integral to a walkway, platform, courtyard, or other paved area and if the sides of

the ramp are protected with built-up curbs or flared sides.

6. Handrails are not required on curb-cuts with flared sides.

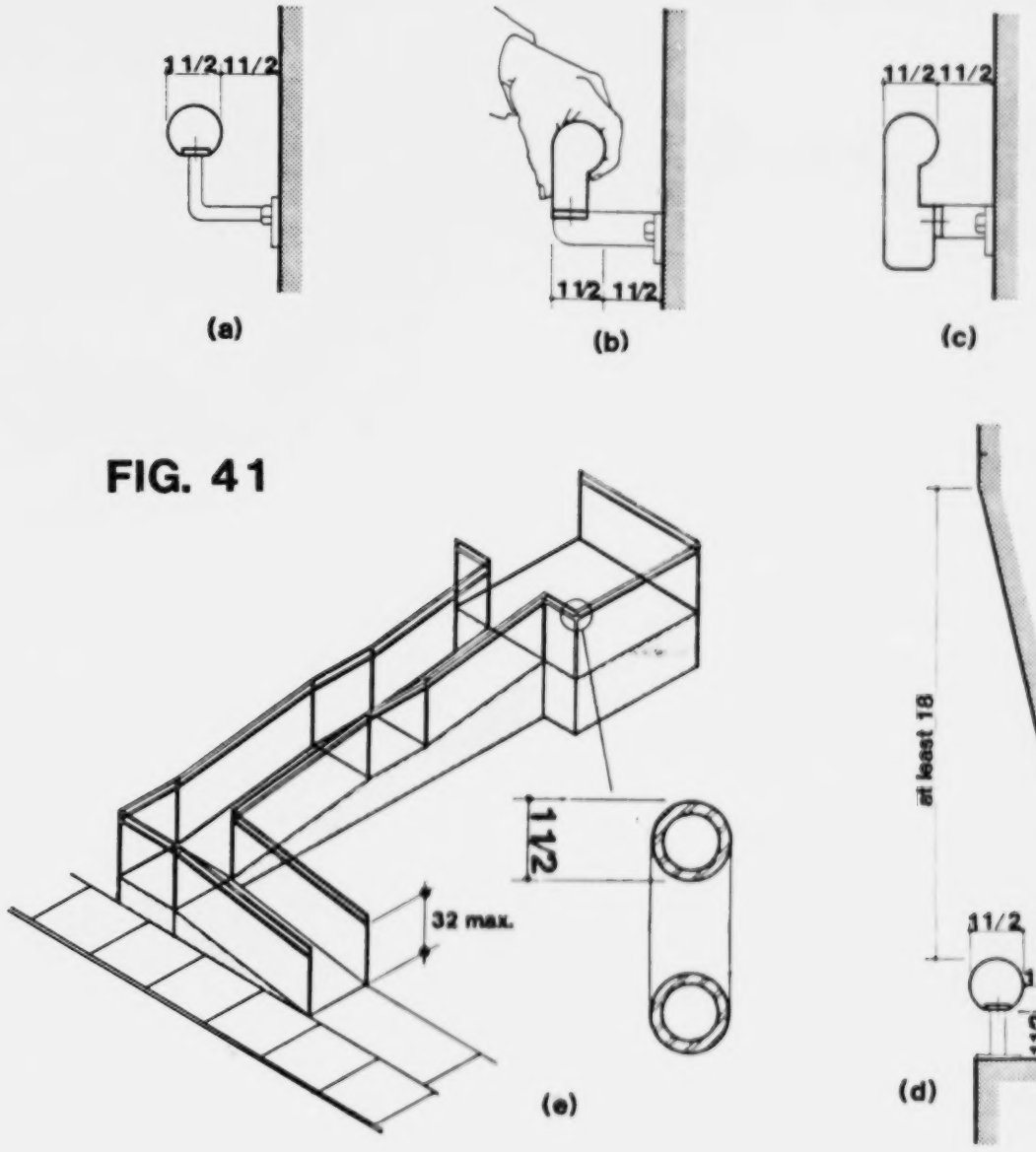


FIG. 41

Cross Slope.
The cross slope of ramp surfaces shall be no greater than 1:50.

Edge Protection.
Ramps and landings with drop-offs shall have curbs, walls, railings, or projecting surfaces that prevent people from slipping off the ramp. Curbs shall be a minimum of 2 inches high (see Figure 42(a).

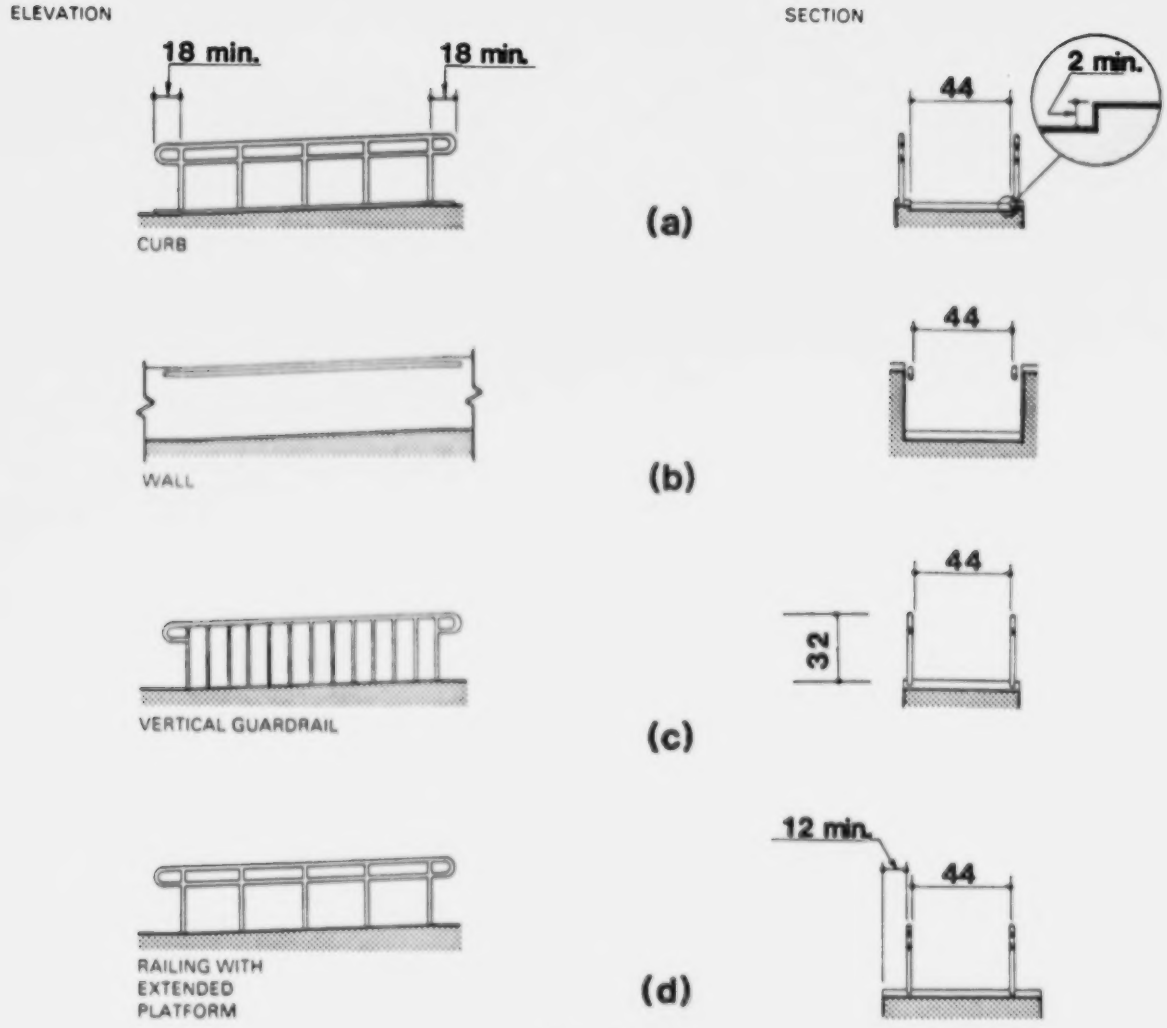


FIG. 42

Outdoor Conditions.

Outdoor ramps and their approaches shall be designed so that water will not accumulate on walking surfaces.

STAIRS (ANSI A117.1, 4.9, 1986 and Subsection 553.48(4)(h), F. S.)

General.

Stairs that are required as a means of egress and stairs between floor levels not connected by an elevator shall comply with *Stairs* section of this manual.

Special Note: All stairs to required accessible floors of buildings shall conform to the requirements of this section.

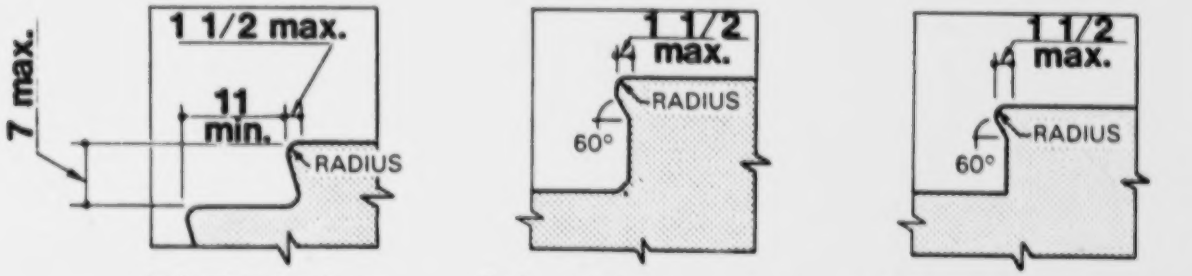
Some people who use walking aids have difficulty with ramps and prefer stairs.

The requirements for stair and ramp handrails in this standard are for adults. When children are principal users in a building or facility, a second set of handrails at an appropriate

height can assist them and aid in preventing accidents.

Treads and Risers.
On any given flight of stairs, all steps shall have uniform riser heights and uniform tread depth. Risers shall be a maximum of 7 inches in height, and stair treads shall be no less than 11 inches in depth, measured from riser to riser (see Figure 42(a). Open risers are not permitted on accessible routes.

Nosings.
Steps in stairs that require use by handicapped persons or aged persons shall not have abrupt or square nosing. The radius of curvature at the leading edge of the tread shall be no greater than 1/2 inch. Risers shall be sloped or the underside of the nosing shall have an angle not less than 60 degrees from the horizontal. Nosings shall project no more than 1 1/2 inches (see Figure 42).



(a) Flush riser (b) Angled nosing (c) Rounded nosing

FIG. 43

Handrails.
Stairways intended for public use shall have handrails at both sides of all stairs. Handrails shall have the following features:

1. Handrails shall be continuous along both sides of stairs. The inside handrail on switchback or dogleg stairs shall always be continuous (see Figures 44(a) and (b).

2. Handrails that are not continuous between flights shall be extended horizontally at least 18 inches at the required height at the top and bottom landings where a guard or wall exists. Handrail extensions shall comply with *Protruding Objects* section of this manual (see Figures 44(c) and (d).

3. The clear space between the handrail and the wall shall be 1 1/2 inches. Handrails may be located in a recess if the recess is a maximum of 3 inches deep and extends at least 18 inches above the top of the rail (see Figure 41(d).

4. Gripping surfaces shall be continuous, without

interruption by newel posts, other construction elements, or obstructions.

5. The diameter or width of the gripping surfaces of a handrail shall be 1 1/4 inches to 1 1/2 inches, or the shape shall provide an equivalent gripping surface (see Figures 41(a), (b), and (c). Standard pipe sizes designated by the industry as 1 1/4 inches to 1 1/2 inches are acceptable industry tolerances.

6. Stairs shall have handrails which are 32 inches above the upper surface of the tread, measured vertically from the tread at the leading edge, allowing a variation of not more than 1/2 inch.

7. A handrail and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch.

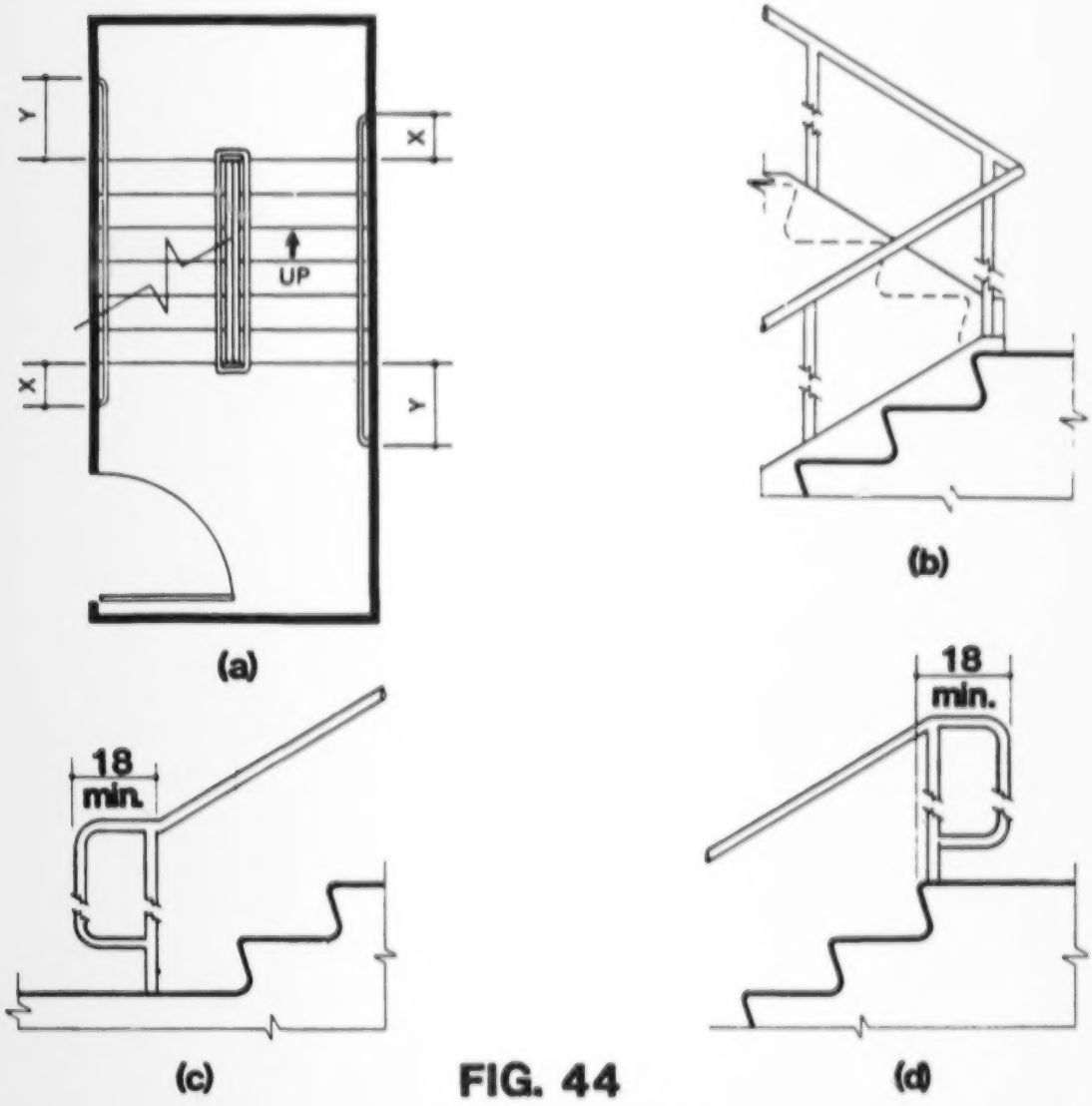


FIG. 44

ELEVATORS (Sections 399.01(3) and 399.035, F. S.)

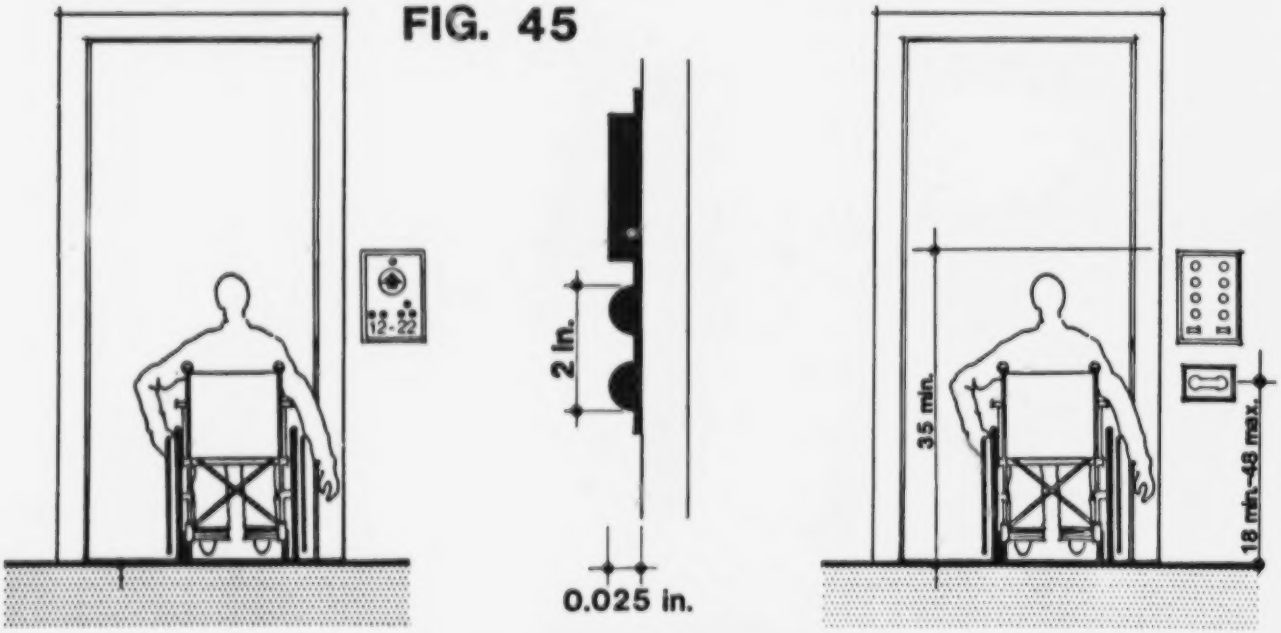
The definition of an "elevator" as used in this section, means all permanently installed machinery, apparatus, and equipment used in raising and lowering a car, cage, or platform vertically between rails or guides; and the term also includes excalators and moving walks, but does not include hand-operated dumbwaiters, construction hoists, or other similar temporary lifting or lowering apparatus.

1. Each elevator, the installation of which is begun after October 1, 1980, shall be made accessible to physically handicapped persons in accordance with the standard "Suggested Minimum Passenger Elevator Requirements for the Handicapped" of the National Elevator Industry, Inc., July 1976 edition, as revised May 1977, with the following exceptions:

2. Floor level numbers or letters and essential control designation symbols on the inside control panel of the elevator car shall be placed at a minimum of 35 inches above the floor and raised a minimum of 0.025 inch, and a Braille symbol raised a minimum of 0.025 inch shall be placed directly adjacent to each such control marking. No control marking may be recessed (see Figure 45(b).

3. In a building having any elevators which do not provide access to every floor level, elevator hallway call buttons shall be marked with Arabic and Braille symbols which indicate floor levels to which access is provided. Such symbols shall be placed directly above each call button (see Figure 45(a).

FIG. 45



(a) Hallway

(b) Braille markings

(c) Inside-essential controls & telephone

4. Door jamb markings shall be a minimum of 2 inches in height and shall be raised a minimum of 0.025 inch.

5. Each elevator car interior shall have a handrail on at least one wall. All handrails shall be smooth with no sharp edges and shall not be more than 1 1/2 inches thick. Handrails shall be continuous and shall extend from and to a point that is no more than 4 inches from an adjacent wall or handrail. The inside surface of handrails shall be 1 1/2 inches clear of the car wall. The distance from the top of the handrail to the finished car floor shall be at least 31 inches and not more than 33 inches. Padded or tuffed material or decorative materials such as wallpaper, vinyl, cloth, or the like may not be used on handrails.

6. Each elevator covered by this section shall be available to be used at any time to assist the physically handicapped in the event of emergency evacuation. The requirements of the latest revision of rules 211.3 and 211.4 of the American National Standards Institute standard ANSI A17.1 (1978) shall be complied with to meet the requirements of this paragraph.

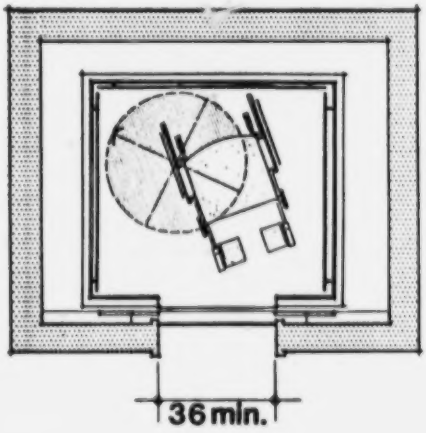


FIG. 46

7. Communications systems shall be positioned under the inside control panel of the car so that the center line of the installation is at a minimum height of 18 inches and a maximum height of 48 inches, with the identification marking raised a minimum of 0.025 inch and placed at the center of the access panel. A Braille symbol raised a minimum of 0.025 inch shall be placed directly adjacent to each such identification marking (see Figure 45(c).

8. A car position indicator shall be provided above the car operating panel or over at least one opening of each car to show the position of the car in the hoistway by illumination of an indicator corresponding to the landing at which the car is stopped or passing. Indicators shall be on a contrasting color background and shall be a minimum of one-half inch in height. An audible signal shall sound to tell a passenger that the car is stopping at a floor served by the elevator.

9. Interior surface of car enclosures shall be of fire-resistive material, and walls shall be surfaced with non-abrasive material. All materials exposed to the car interior shall conform to the standards of the Elevator Safety Code. Floor coverings shall have a nonslip hard surface. Carpeting, if used on floors, shall be securely attached, heavy-duty, with a tight weave and low pile, and installed without padding. Vinyl or similar floor coverings shall be without padding.

10. A bench or seat may be installed on the rear wall of the elevator car enclosure, provided the bench or seat does not protrude beyond the vertical plane of the elevator car enclosure wall when folded into a recess provided for the bench or seat and, when not in use, the bench or seat automatically folds into the recess. The bench or seat shall be capable of supporting a live load of at least 250 pounds on any 12 inch by 12 inch area. No padded, tufted, or other decorative material may be used to cover the bench or seat. Under no circumstances may the bench or seat encroach on the minimum clear-inside-car dimensions specified in this section.

11. Car and hoistway doors shall be power-operated, automatic, and of the horizontal slide type with a minimum clear opening width of 36 inches (see Figure 46). Doors shall be provided with a door reopening device which will function to stop and reopen a car door and adjacent hoistway door in case the car door is obstructed while closing. This reopening device shall also be capable of sensing an object or person in the path of a closing door without requiring contact with the door for activation at a nominal 5 inches and 29 inches above the finished floor. such device shall be operative at all times.

12. Any building of three or fewer stories may be equipped with elevators of 1,500 pound capacity if the minimum clear-inside-car dimensions are no less than 51 inches wide and no less than 51 inches deep, the door opening is at least 32 inches and not centered but is at a side of the car, and the inside car control panel is mounted adjacent to the door opening on the car wall that is adjacent to the door opening.

13. The exception provided in the "Suggested Minimum Passenger Elevator Requirements for the Handicapped" in paragraph 6 of the standard for elevators in schools, institutions, or other buildings specifically authorized by local authorities is not applicable in this state.

14. Any building more than three stories high, the construction of which was begun on or after October 1, 1978, shall contain at least one elevator which will accommodate an ambulance stretcher 76 inches long and 24 inches wide in the horizontal position.

15. This section applies only to elevators available for the transportation of the general public. This section does not apply to elevators restricted by key or similar

device to a limited number of persons in a building that has an elevator that otherwise meet the requirements of this section or to elevators primarily used for the transportation of freight. This section does not apply to dumbwaiters or escalators.

16. This section supersedes all other state laws and regulations affecting the accessibility of passenger elevators to the physically handicapped, and the standards established by this section may not be modified by municipal or county ordinance.

WINDOWS (ANSI A117.1, 4.12, 1986)

General.
Windows intended to be operated by occupants in accessible spaces shall comply with *Windows* section of this manual.

Window Hardware.
Windows requiring pushing, pulling, or lifting to open (for example, double-hung, sliding, or casement and awning units without cranks) shall require no more than 5 pounds force to open or close. Locks, cranks, and other window hardware shall comply with *Controls and Operating Mechanisms* section of this manual.

DOORS (ANSI A117.1, 4.13, 1986 and Subsection 553.48(4)(i), F.S.)

General.
Doors to accessible spaces and elements and along accessible routes shall comply with the requirements of *Doors* section of this manual.

Revolving Doors and Turnstiles.
Interior or exterior turnstiles are prohibited except that, in occupancies serving over 100 persons, turnstiles may be used if there is available an alternate adjacent means of passage, unlocked, with operating mechanisms as set forth in this section, which provides at least 32 inches of clearance.

Gates.
Gates, including ticket gates, shall meet all applicable specifications of *Doors* section of this manual.

Width.

1. Single-leaf walk-through swinging doors and at least one leaf of manually operated multiple-leaf swinging doors shall be at least 32 inches wide.

2. All walk-through openings shall have at least 29 inches of clear width.

Special Note: The Life Safety Code NFPA 101 takes precedence in case of any code conflict.

Maneuvering Clearances at Doors.

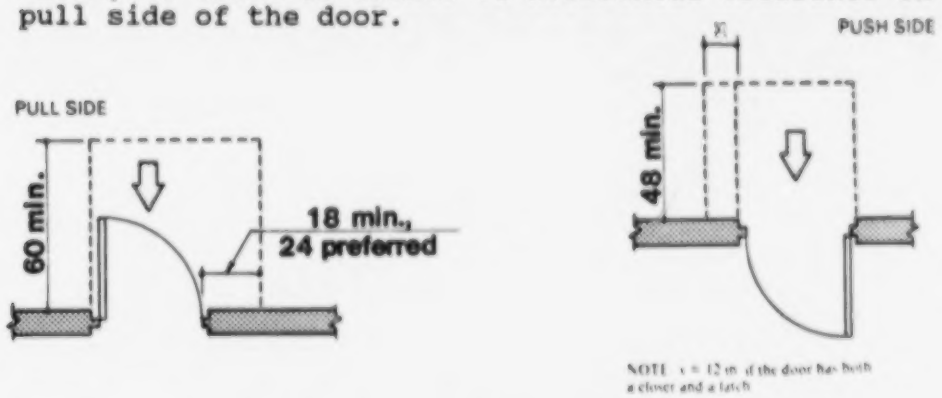
1. Maneuvering clearances at doorways shall be unobstructed.

2. Minimum maneuvering clearances at doors that are not automatic shall be as shown in Figure 48.

3. The floor or ground area within the required clearances shall be level.

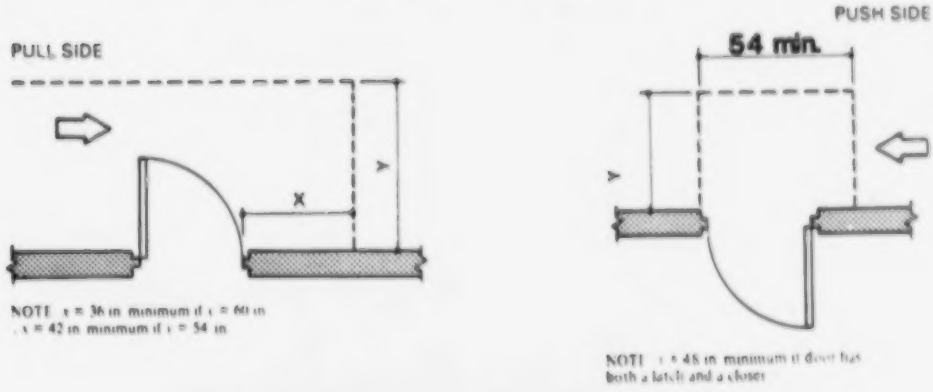
4. Entry doors to acute care hospital bedrooms for inpatients shall be exempt from the requirement for space at the latch side of the door (see dimension *x* in Figure 47) if the door is at least 44 inches wide.

5. If a side-hinged swinging door is double-acting, there shall be at least 3 inches of horizontal clearance on the latch side both inside and outside the doorway. If an exterior side-hinged swinging door swings one way, there shall be, on the latch side, at least 24 inches of horizontal clearance on the pull side and at least 3 inches of horizontal clearance on the push side. There shall be, on the latch side of the interior side-hinged swinging doors, at least 12 inches of horizontal clearance on the pull side of the door.



NOTE: x = 12 in if the door has both a closer and a latch

(a) Front Approaches-Swinging doors

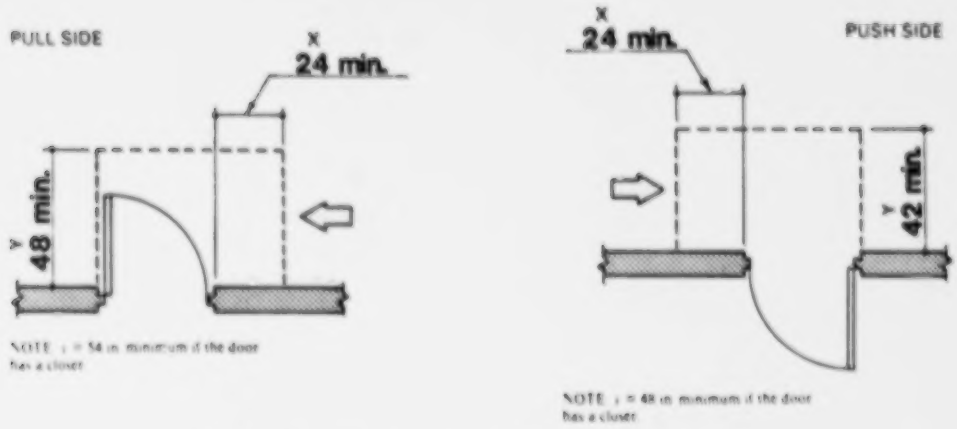


NOTE: x = 36 in minimum if y = 60 in
x = 42 in minimum if y = 54 in

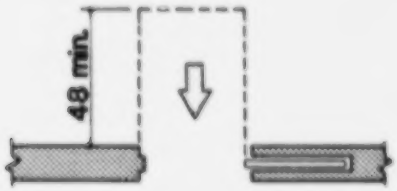
NOTE: y = 48 in minimum if door has both a latch and a closer

(b) Hinge-side Approaches-Swinging doors

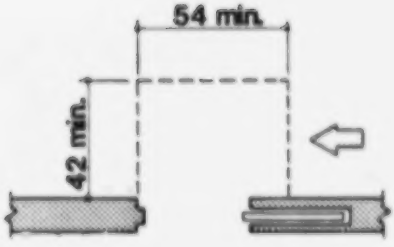
NOTE: All doors in alcoves shall comply with the clearances for front approaches



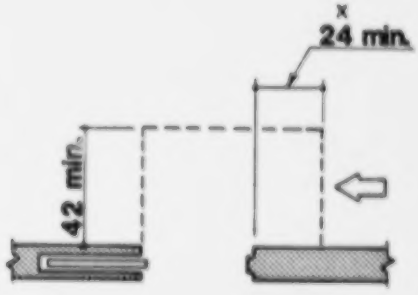
(c) Latch-side Approaches-Swinging doors



(d) Front Approach-Sliding doors and folding doors



(e) Side-sl Approach-
Sliding doors and folding doors
NOTE: All doors in alcoves shall comply with the clearances for front approaches.



(f) Latch-side Approach-
Sliding doors and folding doors

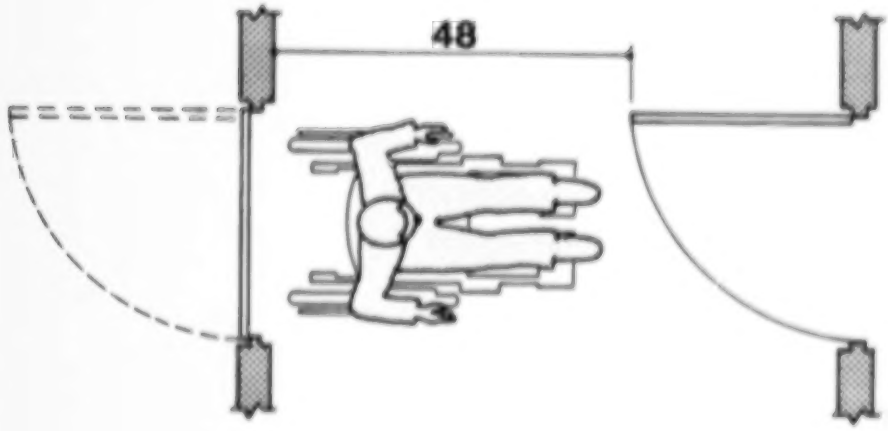
FIG. 47

Two Doors in Series.

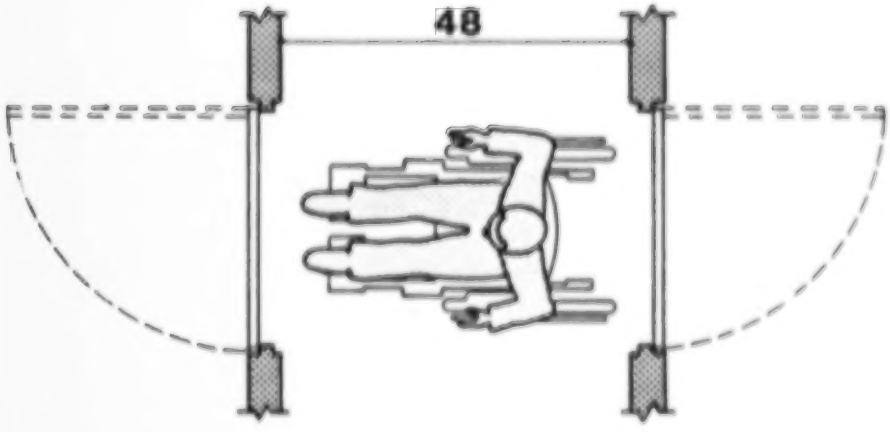
The minimum space between two hinged or pivoted doors in series shall be 48 inches plus the width of any door swinging into the space. Doors in series shall swing either in the same direction or away from the space between the doors (see Figure 48). (For additional information see *Toilet Rooms, Bathrooms, Bathing Facilities, and Shower Rooms* and *Restroom Vestibules* sections of this manual.)

Special Note: If doorways have two independently operated

door leaves, then at least one leaf shall meet the specifications in accordance with *Doors - Width - Maneuvering Clearance at Doors* section of this manual.



(a)



(b)

FIG. 48

Thresholds at Doorways.

Thresholds at doorways shall not exceed 1/2 inch in height for exterior residential sliding doors or 1/2 inch for other types of doors. Raised thresholds and floor level changes at accessible doorways shall be beveled with a slope no greater than 1:2 (see *Ground and Floor Surfaces - Changes in Level* section of this manual).

Special Note: Thresholds and changes in surface height in doorways are particularly inconvenient for people with mobility impairments who also have low stamina or restrictions in arm movement, because complex maneuvering is required to get over the level change while operating the door.

Door Hardware.

1. Handrails, pulls, locksets, and other operating mechanisms on entrance doors, restroom and toilet room doors, and other mechanisms or U-shaped handles shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. This requirement shall be satisfied by the 5 pound feet standard as described in *Doors - Door-Opening Force* section of this manual. They shall be mounted within reach ranges specified in *Space Allowances and Reach Ranges* section of this manual.

Special Note: The traditional round shaped door handle does not meet the intent of the code in the applications listed in paragraph 1 of this section.

Some physically handicapped persons must push against a door with their chair or walker to open it. Applied kickplates on doors with closers can reduce required maintenance by withstanding abuse from wheelchairs and canes.

2. When sliding doors are fully open, operating hardware shall be exposed and usable from both sides.

3. A door that is not intended for regular use and that could prove dangerous if used by a blind person shall have a knurled handle or knob or a handle or knob coated with an abrasive plastic coating. Such doors shall also have warning signs as provided in this manual.

Door Closers.

If a door has a closer, then the sweep period of the closer shall be adjusted so that from an open position of 90 degrees, the door will take at least 3 seconds to move to an open position of approximately 12 degrees.

Door-Opening Force.

All doors shall be openable by a single effort. The maximum force required to open a door shall be as follows, except that such requirements do not apply to the effort required to retract latch bolts or disengage other devices which keep the door closed for safety reasons:

Special Note: Forces to operate a door involve more than a

simple single operation. Doors must be unlatched and additional force applied to overcome the inertia of a door. In general, only a momentary auxiliary force should be permitted to exceed the force given in ANSI A117.1, 1986, 4.13.11.

1. Exterior swinging doors shall be openable by a force of not more than 8.5 pounds applied to the latch stile.

2. Interior swinging doors shall be openable by a force of not more than 5 pounds applied to the latch stile.

3. Sliding or folding doors shall be openable by a force of not more than 5 pounds.

4. Fire doors shall have the minimum opening force allowable in accordance with the National Fire Protection Association 101, Life Safety Code, Section 5-2.1.4.3.

Automatic Doors.
If an automatic door is used, it shall comply with ANSI/BHMA A156.10-1985.

Power-Assisted Doors and Low-Energy Power-Operated Doors.
Power-assisted doors shall comply with ANSI/BHMA A156.19-1984. Such doors shall not open to back check faster than 3 seconds and shall require no more than 15 pounds to stop door movement.

ENTRANCES (ANSI A117.1, 4.14, 1986)

General.
Entrances to a building or facility that are part of an accessible route shall comply with *Accessible Route* section of this manual. Such entrances shall be connected by an accessible route to public transportation stops, to accessible parking and passenger loading zones, and to public streets or sidewalks if available (see *Accessible Route - Location* (paragraph 1) section of this manual). They shall also be connected by an accessible route to all accessible spaces or elements within the building or facility.

Service Entrances.
A service entrance shall not be the sole accessible entrance unless it is the only entrance to a building or facility (for example, in a factory or garage).

DRINKING FOUNTAINS AND WATER COOLERS (ANSI A117.1, 4.15, 1986 and Subsection 553.48(4)(m), F. S.)

General.
All drinking fountains and water coolers on an accessible route shall comply with *Protruding Objects* section of this manual. Accessible drinking fountains or water coolers shall comply with *Drink Fountains and Water Coolers* section of this manual and shall be on an accessible route.

Spout Height.

Spouts shall be no higher than 36 inches, measured from the floor or ground surfaces to the spout outlet (see Figure 50).

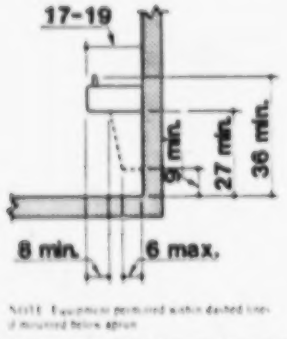
Spout Location and Controls.

Where water fountains or other means of dispensing water are provided, at least one such fountain or device shall be accessible and shall have upfront spouts and either hand-operated or hand-and-foot-operated controls. The spout shall provide a flow of water at least 4 inches high so as to allow the insertion of a cup or glass under the flow of water.

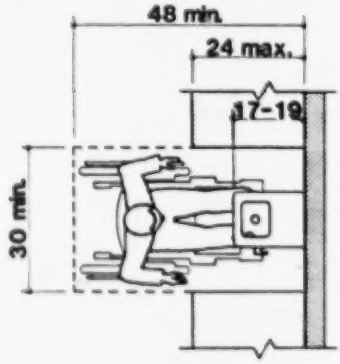
Clearances.

1. Wall-mounted and post-mounted cantilevered units shall have a clear knee space between the bottom of the apron and the floor or ground at least 27 inches high, 30 inches wide, and 17 inches to 19 inches deep (see Figures 49(a) and (b). Such units shall also have a minimum clear floor space 30 inches by 48 inches to allow a person in a wheelchair to approach the unit facing forward.

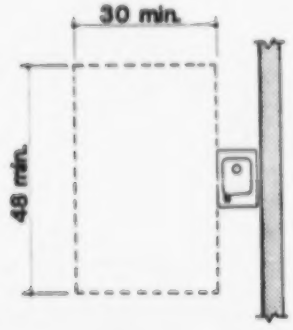
2. Free-standing or built-in units not having a clear space under them shall have a clear floor space at least 30 inches by 48 inches that allows a person in a wheelchair to make a parallel approach to the unit (see Figures 49(a) and (b). This clear floor space shall comply with *Space Allowances and Reach Ranges - Clear Floor or Ground Space for Wheelchairs* section of this manual.



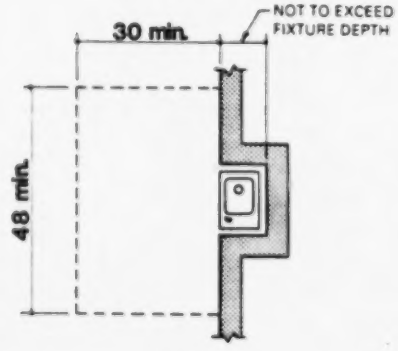
(a) Spout height and knee clearance



(b) Clear floor space



(c)



(d)

FIG. 49

RESTROOM VESTIBULES (Subsection 553.48(4)(k)(10), F. S.)

1. Restroom vestibules having a series of doors shall have an unobstructed width of at least 52 inches and unobstructed depth of at least 72 inches finished inside dimensions (see Figure 50).

2. The inside door must swing into the restroom.

3. There must be at least 12 inches of clear space on the latch side of the door, unless the door is double-acting.

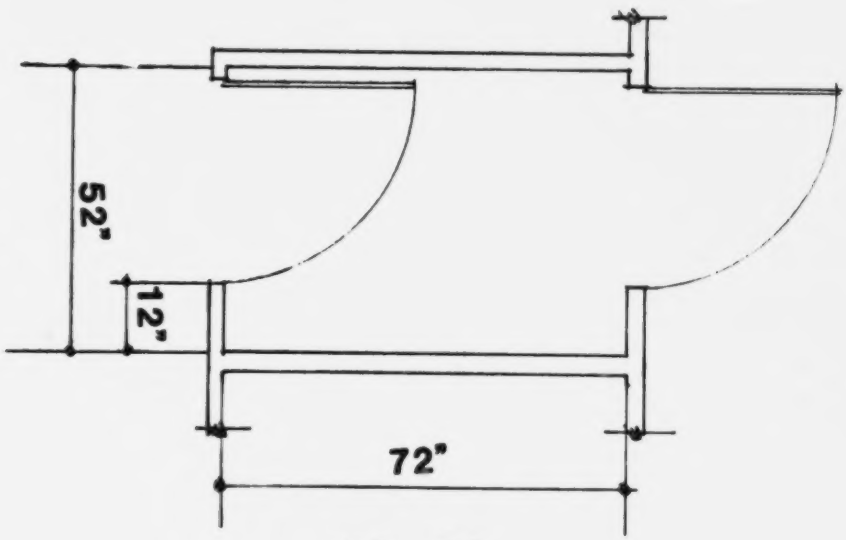


FIG. 50

RESTROOM AND TOILET ROOM CLEAR PASSAGE (Subsection 553.48(4)(k)(1), F. S.)

Each restroom and toilet room shall have a minimum clear passage of at least 36 inches to the accessible toilet stall. If turns of 45 degrees or more are required, this passageway shall be at least 44 inches wide.

WATER CLOSETS (ANSI A117.1, 4.16, 1986 and Subsections 553.48(4)(k)(7&8), F. S.)

General.
Accessible water closets shall comply with *Water Closets* section of this manual.

Special Note: The information contained in this section applies to both single-station facilities and to accessible stalls of multi-station facilities.

Clear Floor Space.
Clear floor space for water closets not in stalls shall

comply with Figure 51. Clear floor space may be arranged to allow either a left-hand or right-hand approach.

Special Note: In accessible toilet rooms and accessible toilet stalls, care should be taken that floor drains are located and constructed so as not to create an undue hazard for wheelchairs, walkers, or canes. For example, a depression in the floor can cause a wheelchair or walker to become an unstable platform if one wheel or leg of a walker enters it creating a diagonal support situation.

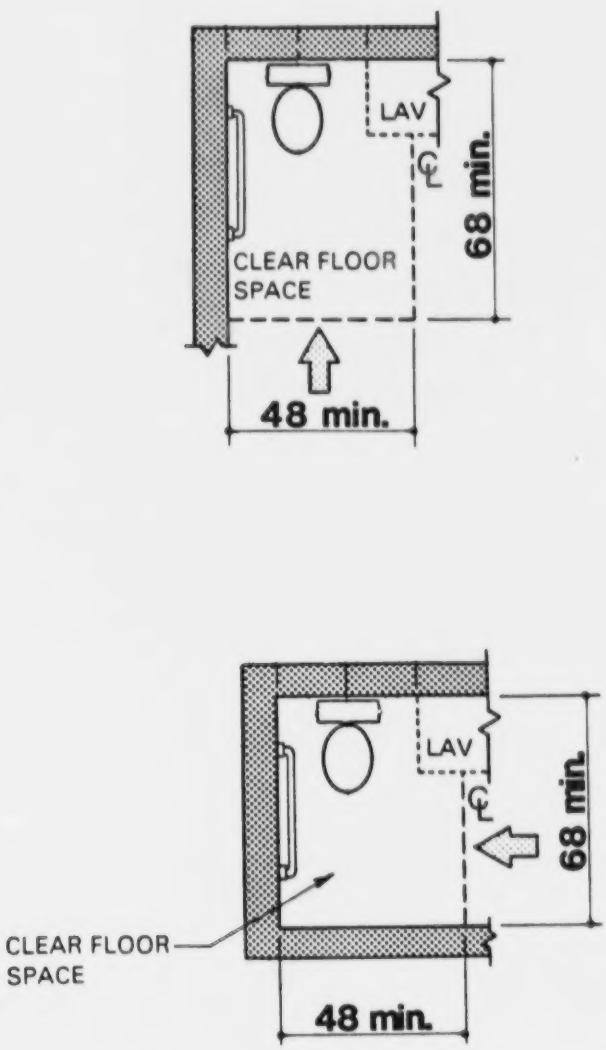


FIG. 51

Height.
Accessible water closet seats shall be at a height of no less than 19 inches and no more than 20 inches, measured vertically from the finished floor to the top of the seat. Seats shall not be sprung to return to a lifted position.

Grab Bars.
A grab bar shall be provided, located 33 inches from and parallel to the finished floor, measured vertically to the top of the rail with a variation of not more than 1/2 inch, and:

1. Shall have an outside diameter of 1 1/2 inches.

2. Shall provide 1 1/2 inches of clearance between the rail and the wall.

3. Shall be so designed and supported as to withstand a load of not less than 250 pounds applied at any point, downward or horizontally.

4. Shall be continuously graspable along the entire length.

Special Note: Grab bars meeting the applicable ANSI standards are deemed to be in compliance with the intent of the law whether center supports exist or not.

5. Shall be at least 24 inches long and shall be centered at the leading edge of the water closet.

Grab bars shall comply with Figure 52 and with *Grab Bars, and Tub and Shower Seats* section of this manual.

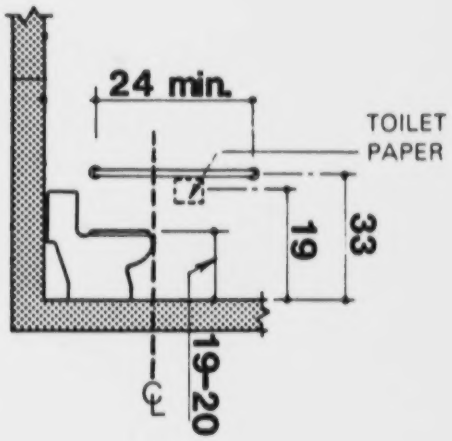


FIG. 52

Flush Controls.
Flush controls shall be hand operated or automatic and shall comply with *Controls and Operating Mechanisms - Operation* section of this manual. Controls for flush valves shall be mounted for

use from the wide side of the toilet stall and shall be no more than 44 inches above the floor.

Dispensers.
Toilet paper dispensers shall comply with *Controls and Operating Mechanisms - Operation* section of this manual and shall be installed within reach, as shown in Figure 52.

TOILET STALLS (ANSI A117.1, 4.17, 1986 and Subsections 553.48(4)(k)(2,3,4,&8), F. S.)

General.
Accessible toilet stalls shall be on an accessible route and shall comply with the requirements of *Toilet Stalls* section of this manual.

Water Closets.
Water closets in accessible stalls shall comply with *Water Closets* section of this manual.

Size and Arrangement.

1. The size and arrangement of toilet stalls shall comply with Figure 53.

2. The accessible toilet stall shall be at least 68 inches by 68 inches and contain an accessible lavatory within it.

3. The accessible water closet shall be located in the corner diagonal to the stall door.

4. Arrangements shown for stall may be reversed to allow either a left-hand or a right-hand approach.

Doors.
Toilet stall doors shall comply with *Doors* section of this manual, except that if the approach is to the latch side of the stall door, the clearance between the door side of the stall and any obstruction may be reduced to a minimum of 42 inches. The stall door shall be located in the wall adjacent to the accessible lavatory, as far from the lavatory as possible. The accessible stall door shall swing out and shall be at least 32 inches wide and shall be of the self-closing type. Such lavatories shall be counted as part of the required fixture count for the building. (For additional information see *Lavatories, Sinks, and Mirrors* section of this manual.)

Grab Bars.
Shall be at least 24 inches long and shall be centered at the leading edge of the water closet. Grab bars complying with the length and positioning shown in Figure 52 shall be provided and shall also comply with the requirements of *Grab Bars, and Tub and Shower Seats* section of this manual.

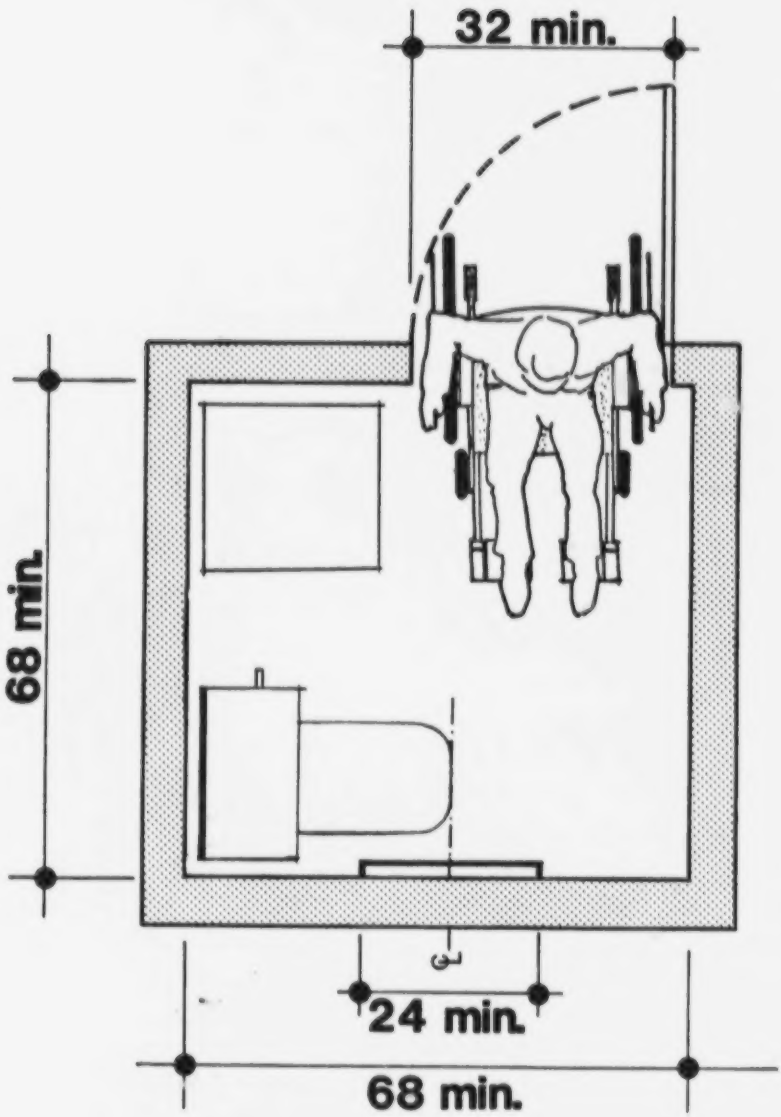


FIG. 53

URINALS (ANSI A117.1, 4.18)

General.
Accessible urinals shall comply with *Urinals* section of this manual.

Height.
Urinals shall be stall type or wall hung with an elongated rim at a maximum of 17 inches above the floor (see Figure 54).

FIG. 54

Clear Floor Space.
A clear floor space 30 inches by 48 inches shall be provided in front of urinals to allow forward approach. This clear space shall adjoin or overlap an accessible route and shall comply with *Space Allowances and Reach Ranges* section of this manual. Privacy shields allowing less than 30 inches clear width shall not extend beyond the front edge of the urinal rim.

Flush Controls.
Flush controls shall be hand operated or automatic, shall comply with *Controls and Operating Mechanisms* section of this manual, and shall be mounted no more than 44 inches above the floor.

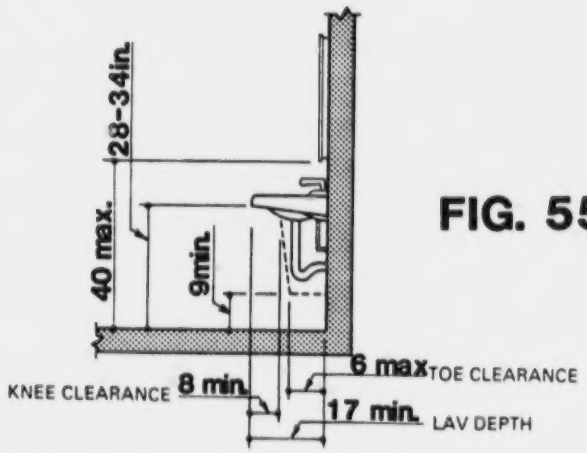
LAVATORIES, SINKS, AND MIRRORS (ANSI A117.1, 4.19, 1986 and Subsections 553.48(4)(k)(5&9), F. S.)

General.
Accessible lavatory fixtures, sinks, vanities, and built-in lavatories shall comply with *Lavatories, Sinks, and Mirrors* section of this manual.

Height and Clearances.

1. **Lavatories.** Accessible lavatories shall have lever-operated faucets and narrow aprons which, when mounted at a height of from 28 inches to 34 inches, measured vertically from the floor to the bottom of the apron, allow for use of the lavatory by persons in wheelchairs. Knee and toe clearances shall comply with Figure 55.

Special Note: Lavatories required in toilet stalls shall be counted a part of the required fixture count.



NOTE: Dashed line indicates dimensional clearance of optional underlavatory enclosure.

FIG. 55

2. **Sinks.** Sinks shall be mounted with the counter or rim no higher than 34 inches from the floor. Each sink shall be a maximum of 6 1/2 inches deep. (Sinks in kitchens of accessible dwelling units shall comply with *Lavatories, Sinks, and Mirrors* section of this manual.)

3. **Clear Floor Space.** Restrooms shall have an unobstructed space of at least 60 inches in diameter or 52 inches by 72 inches finished inside dimension adjacent to the lavatory area. Such clear floor space shall adjoin or overlap an accessible route and shall extend a maximum of 19 inches underneath the lavatory or sink (see Figure 56).

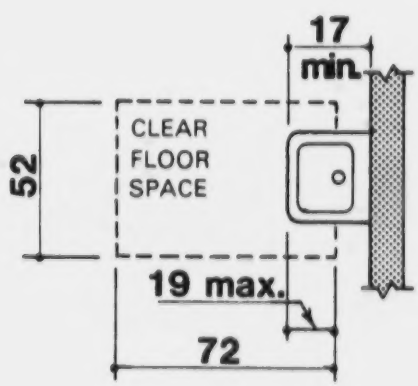


FIG. 56

4. **Exposed Pipes and Surfaces.** Hot water and drain pipes under lavatories or sinks shall be insulated or otherwise protected. There shall be no sharp or abrasive surfaces under lavatories or sinks.

5. **Faucets.** Faucets shall comply with *Controls and Operating Mechanisms - Operation* section of this manual. Conventional one-quarter-turn, lever-operated, push-type, and automatically controlled mechanisms are examples of acceptable

designs. Self-closing valves are allowed if the faucet remains open for at least 10 seconds.

6. **Mirrors.** Mirrors shall be mounted with the bottom edge of the reflecting surface no higher than 40 inches from the floor (see Figure 55).

7. **Towel Dispensers.** At a location adjacent to accessible lavatories there shall be at least one towel dispenser within the toilet stall or toilet room.

BATHTUBS (ANSI A117.1, 4.20, 1986)

General.
Accessible bathtubs shall comply with *Bathtubs* section of this manual.

Floor Space.
Clear floor space in front of bathtubs shall be as shown in Figures 57 and 58.

Seat.
An in-tub seat or a seat at the head end of the tub shall be provided as shown in Figures 57 and 58. The structural strength of seats and their attachments shall comply with *Grab Bars, and Tub and Shower Seats - Structural Strength* section of this manual. Seats shall be mounted securely and shall not slip during use.

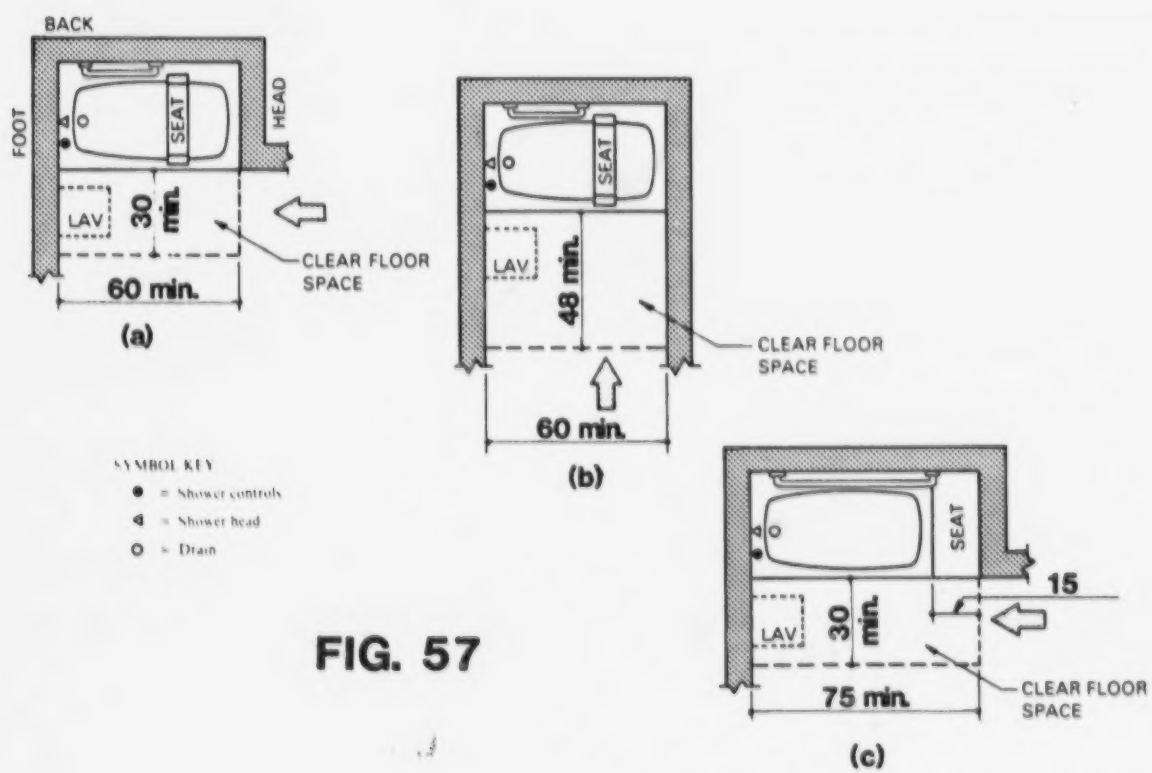
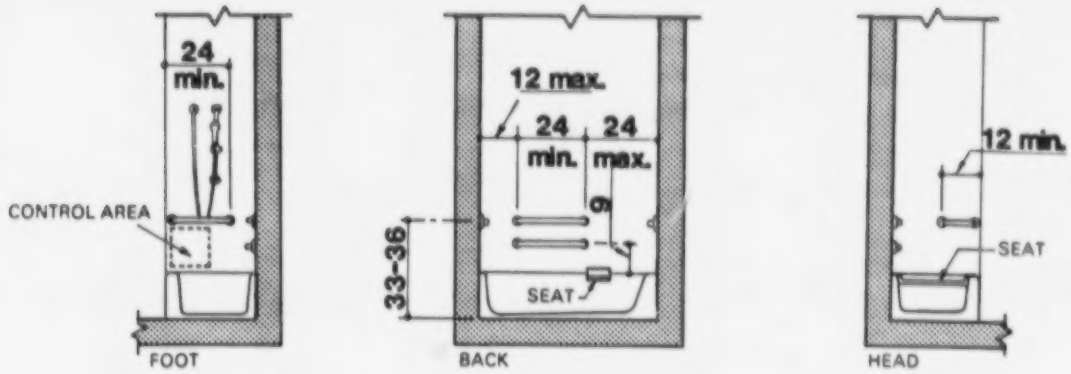
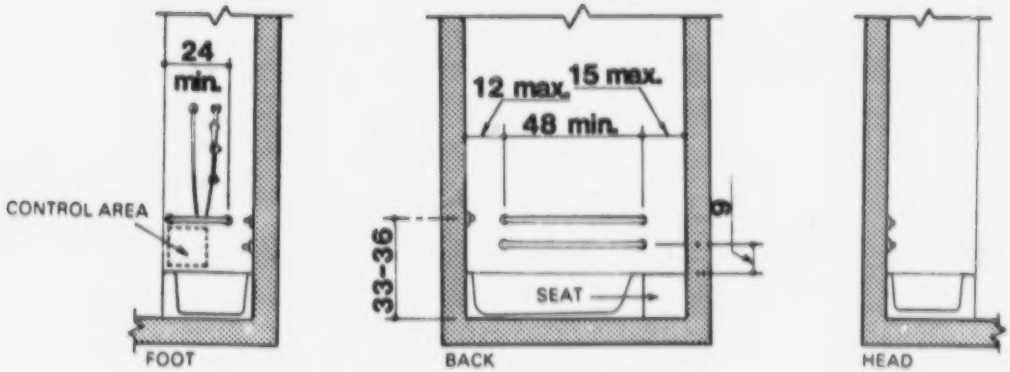


FIG. 57

62



(a) With seat in tub



(b) With seat at head of tub

FIG. 58

Grab Bars.

Grab bars complying with *Grab Bars, and Tub and Shower Seats* section of this manual shall be provided as shown in Figures 57 and 58.

Controls.

Faucets and other controls complying with *Controls and Operating Mechanisms - Operation* section of this manual shall be located as shown in Figure 58.

Shower Unit.

A shower spray unit shall be provided with a hose at least 60 inches long that can be used as a fixed shower head or as a handheld shower. If an adjustable-height shower head mounted on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars.

Bathtub Enclosures.

If provided, enclosures for bathtubs shall not obstruct controls or transfer from wheelchairs onto bathtub seats or into tubs. Enclosures on bathtubs shall not have tracks mounted on their rims.

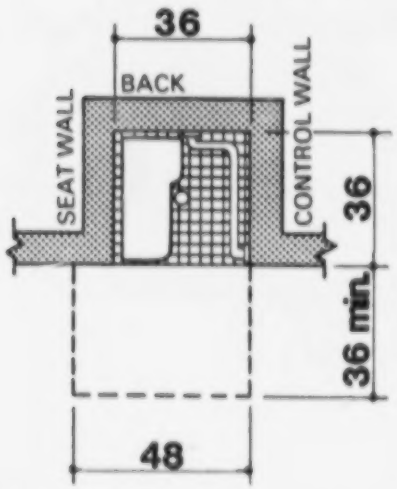
SHOWER STALLS (ANSI A117.1, 4.21, 1986)

General.

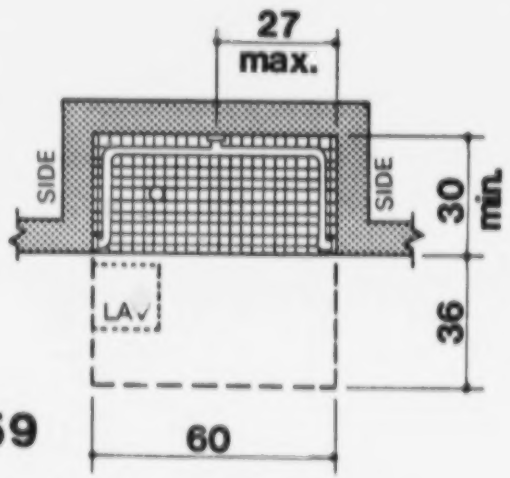
Accessible shower stalls shall comply with *Shower Stalls* section of this manual.

Size and Clearances.

Shower stall size and clear floor space shall comply with Figure 59(c) or Figure 59(b). The shower stall in Figure 59(a) shall be 36 inches by 36 inches. The shower stall in Figure 59(b) will fit into the space required for a bathtub.



(a) 36-in. by 36-in. stall



(b) 30-in. by 60-in. stall

FIG. 59

Seat.

A seat shall be provided in shower stalls 36 inches by 36 inches and shall be as shown in Figure 60. The seat shall be mounted 17 inches to 19 inches from the bathroom floor and shall extend the full depth of the stall. The seat shall be on the wall opposite the controls. The structural strength of seats and their attachments shall comply with *Grab Bars, and Tub and Shower Seats - Structural Strength* section of this manual.

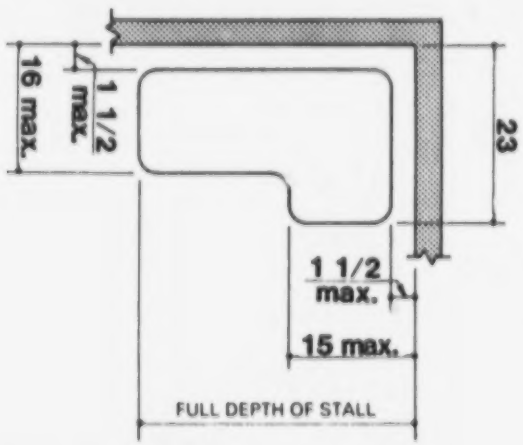
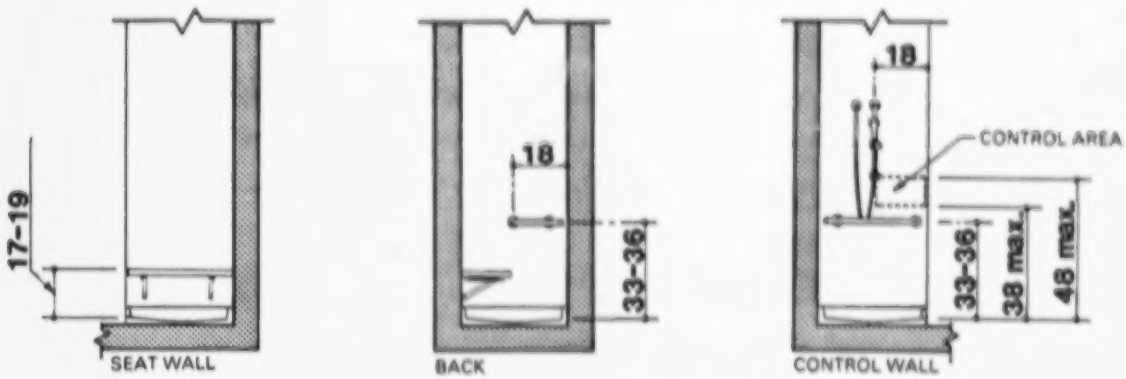


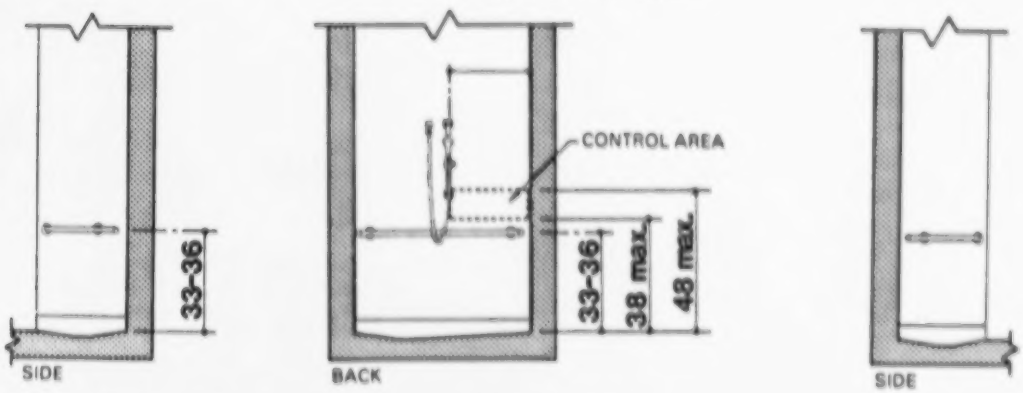
FIG. 60

Grab Bars.

Grab bars complying with *Grab Bars, and Tub and Shower Seats* section of this manual shall be provided as shown in Figure 61.



(a) 36-in. by 36-in. stall



NOTE: Shower head and control area may be on back wall (as shown) or on either side wall.

(b) 30-in. by 60-in. stall

FIG. 61

Controls.

Faucets and other controls complying with *Controls and Operating Mechanisms - Operation* section of this manual shall be located as shown in Figure 61. In shower stalls 36 inches by 36 inches, all controls, faucets, and the shower unit shall be mounted on the side wall opposite the seat.

Shower Unit.

A shower spray unit shall be provided with a hose at least 60 inches long that can be used as a fixed shower head or as a hand-held shower. If an adjustable-height shower head mounted on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars.

Curbs.

If provided, curbs in shower stalls 36 inches by 36 inches

shall be no higher than 4 inches. Shower stalls that are 30 inches by 60 inches shall not have curbs.

Shower Enclosures.
If provided, enclosures for shower stalls shall not obstruct controls or obstruct transfer from wheelchairs onto shower seats.

TOILET ROOMS, BATHROOMS, BATHING FACILITIES, AND SHOWER ROOMS
(ANSI A117.1, 4.22, 1986)

General.
Accessible toilet rooms, bathrooms, bathing facilities, and shower rooms shall comply with *Toilet Rooms, Bathrooms, Bathing Facilities, and Shower Rooms* section of this manual and shall be on an accessible route.

Doors.
All doors to accessible toilet rooms, bathrooms, bathing facilities, and shower rooms shall comply with *Doors* section of this manual. Doors may swing into the clear floor space required for any fixture only in a toilet or bathroom for individual use that provides sufficient maneuvering space (see Figures 3 and 4 on page 5) within the room for a person using a wheelchair to enter and close the door, use the fixtures, reopen the door, and exit.

Clear Floor Space.
Accessible fixtures and controls shall comply with *Water Closets* through *Shower Stalls* sections of this manual and shall be on an accessible route. An unobstructed turning space complying with *Space Allowances and Reach Ranges - Wheelchair Turning Space* and *Size and Approach* sections of this manual shall be provided within an accessible room. The clear floor spaces at fixtures and controls, the accessible route, and the turning space may overlap.

Controls and Dispensers.
If controls, dispensers, receptacles, or other equipment are provided, at least one of each shall be on an accessible route and shall comply with *Controls and Operating Mechanisms* section of this manual.

Medicine Cabinets.
Accessible medicine cabinets shall be located with a usable shelf no higher than 44 inches above the floor. The floor space shall comply with *Space Allowances and Reach Ranges - Clear Floor or Ground Space for Wheelchairs* section of this manual.

CHANGING ROOMS (Subsection 553.48(4)(n), F. S.)

General.
In retail occupancies providing changing rooms for the public, at least one changing room (see Figure 62) shall:

1. Provide an opening of at least 29 inches clear width.

2. Have unobstructed finished inside dimensions of at least 36 inches wide by 60 inches deep.

3. If a door is provided, have a door that swings out.

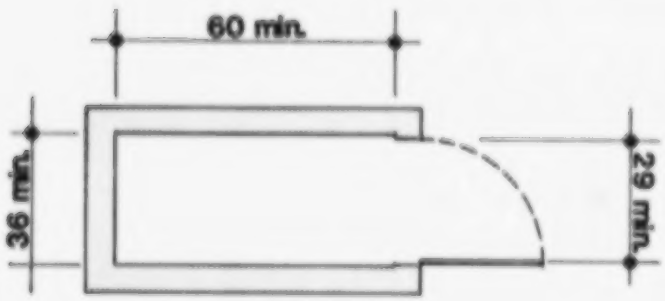


FIG. 62

STORAGE (ANSI A117.1, 4.23, 1986)

General.

Accessible storage facilities such as cabinets, shelves, closets, and drawers shall comply with *Storage* section of this manual.

Clear Floor Space.

A clear floor space at least 30 inches by 48 inches complying with *Space Allowances and Reach Ranges - Clear Floor or Ground Space for Wheelchairs* section of this manual that allows either a forward or parallel approach by a person using a wheelchair shall be provided at accessible storage facilities.

Height.

Accessible storage spaces shall be within at least one of the reach ranges specified in *Space Allowances and Reach Ranges - Forward Reach* and *Side Reach* sections of this manual. Clothes rods shall be a maximum of 54 inches from the floor (see Figure 63).

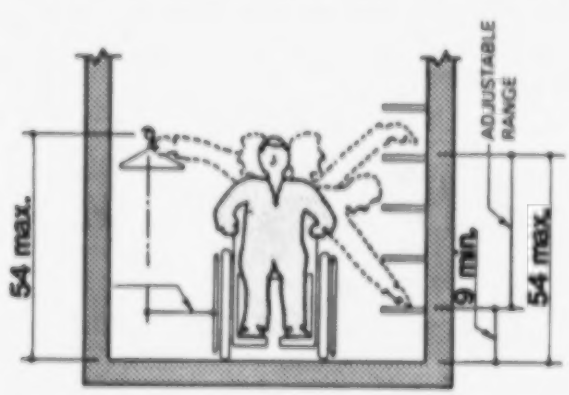


FIG. 63

Hardware.

Hardware for accessible storage facilities shall comply with *Controls and Operating Mechanisms - Operation* section of this manual. Touch latches and U-shaped pulls are acceptable.

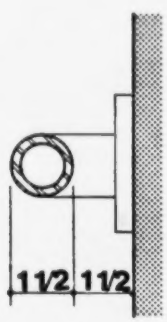
GRAB BARS, AND TUB AND SHOWER SEATS (ANSI A117.1, 4.24, 1986 and Subsection 553.48(4)(k)(8), F. S.)

General.
All grab bars and tub and shower seats in accessible toilet or bathing facilities shall comply with *Grab Bars, and Tub and Shower Seats* section of this manual.

Size and Spacing of Grab Bars.
A grab bar shall be provided, located 33 inches from and parallel to the finished floor, measured vertically to the top of the rail with a variation of not more than 1/2 inch, and

1. Shall have an outside diameter of 1 1/2 inches or the shape shall provide an equivalent gripping surface (see Figure 64).

FIG. 64



2. Shall provide 1 1/2 inches of clearance between the rail and the wall.

3. Shall be continuously graspable along the entire length.

Structural Strength.
The structural strength of grab bars, tub and shower seats, fasteners, and mounting devices shall meet the following specifications:

1. Shall be designed and supported as to withstand a load of not less than 250 pounds applied at any point, downward or horizontally.

2. Grab bars shall not rotate within their fittings.

Eliminating Hazards
A grab bar and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch.

CONTROLS AND OPERATING MECHANISMS (ANSI A117.1, 4.25, 1986 and Subsection 553.48(4)(l), F. S.)

Controls and operating mechanisms in accessible spaces, along accessible routes, or as part of accessible elements (for example, light switches, dispenser controls) shall comply with *Controls and Operating Mechanisms* section of this manual.

Clear Floor Space.

Clear floor space complying with *Space Allowances and Reach Ranges - Clear Floor or Ground Space for Wheelchairs* section of this manual that allows a forward or a parallel approach by a person using a wheelchair shall be provided at controls, dispensers, receptacles, and other operable equipment.

Height.

Switches and controls for light, heat ventilation, windows, and draperies, and all other controls of frequent and essential use, shall be placed between 42 inches and 52 inches from the floor. Except where the use of special equipment dictates otherwise, electrical and communications-system receptacles on walls shall be mounted no less than 15 inches above the floor.

Operation.

Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds.

ALARMS (ANSI A117.1, 4.26, 1986 and Subsection 553.48(4)(p), F.S.)

General.

Where warning signals are used, audible signals shall be accompanied by visual signals for the benefit of the hearing-impaired, and visual signals shall be accompanied by audible signals for the benefit of the blind.

Audible Alarms.

Audible emergency alarms shall produce a sound that exceeds the prevailing equivalent sound level in the room or space by at least 15 decibels or exceeds any maximum sound level with a duration of 30 seconds by 5 decibels, whichever is louder. Sound levels for alarm signals shall not exceed 120 decibels.

Special Note: Audible emergency signals must have an intensity and frequency that can attract the attention of individuals who have partial hearing loss.

Visual Alarms.

Visual alarms shall be flashing lights arranged to flash in conjunction with the audible emergency alarms. The flashing frequency of visual alarms shall be approximately 1 Hz.

Specialized systems using advanced technology may be substituted if equivalent protection is afforded handicapped users of the building or facility.

Auxiliary Alarms.

Sensory alarms provided for persons with hearing impairments shall be connected to the building emergency system or there shall be a standard 110-volt electrical receptacle into which an alarm unit can be connected to be activated by the building alarm system. Instructions for use of the auxiliary alarm or connections shall be provided.

Special Note: To be effective, visual auxiliary alarm devices must be located and oriented so that they will spread signals and reflections throughout a space or raise the overall light level sharply. Deaf people many not need accessibility features other than the emergency alarm connections and communications devices. Thus, rooms, in addition to those accessible for mobility impaired persons, should also be equipped with emergency visual alarms or connections.

DETECTABLE WARNINGS (ANSI A117.1, 4.27, 1986 and Subsection 553.48(4)(i)(4), F. S.)

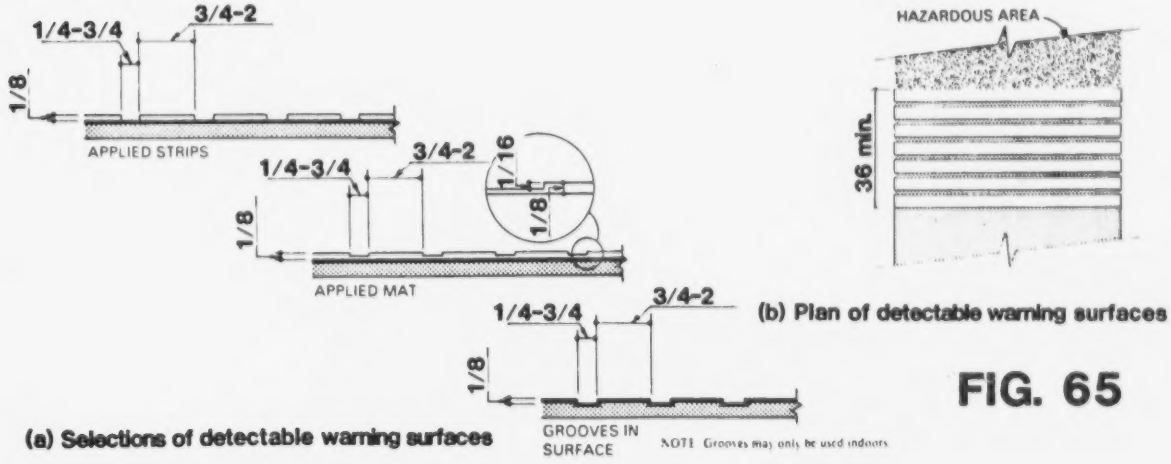
General.

Detectable warnings shall comply with *Detectable Warnings* section of this manual.

Detectable Warnings on Walking Surfaces.

Detectable warning textures on walking surfaces shall consist of exposed aggregate concrete, cushioned surfaces made of rubber or plastic, raised strips, or grooves. Textures shall contrast with that of the surrounding surface. Raised strips or grooves shall comply with Figure 65. Grooves may be used indoors only.

Special Note: Warnings set slightly more than one pace (24 inches to 48 inches) in front of a hazard allow a blind person to perceive the signal, follow through with one last step, and stop before encountering the hazard.



(a) Selections of detectable warning surfaces

(b) Plan of detectable warning surfaces

FIG. 65

Tactile Warnings on Doors to Hazardous Areas.

A door that is not intended for regular use and that could prove dangerous if used by a blind person (for example, doors to loading platforms, boiler rooms, stages and the like) shall have a knurled handle or knob or a handle or knob coated with an abrasive plastic coating. Such doors shall also have warning signs as provided in this section. Such textured surfaces shall not be provided for emergency exit doors or any doors other than those to hazardous areas.

Detectable Warnings at Stairs.

All stairs, except those in dwelling units, in enclosed stair towers or set to the side of the path of travel shall have a detectable warning at the top of stair runs (see Figure 66).

FIG. 66

Detectable Warnings at Hazardous Vehicular Areas.

If a walk crosses or adjoins a frequently used vehicular way, and if there are no curbs, railings, or other elements detectable by a person who has a severe visual impairment separating the pedestrian and vehicular areas, the boundary between the areas shall be defined by a continuous, detectable warning texture, which is 44 inches wide, complying with *Detectable Warnings - Detectable Warnings on Walking Surfaces* section of this manual (see Figure 67).

Special Note: Curbs on sidewalks serve as customary cues for the edge of a street. The abrupt change in level is easily perceived by a cane or foot.

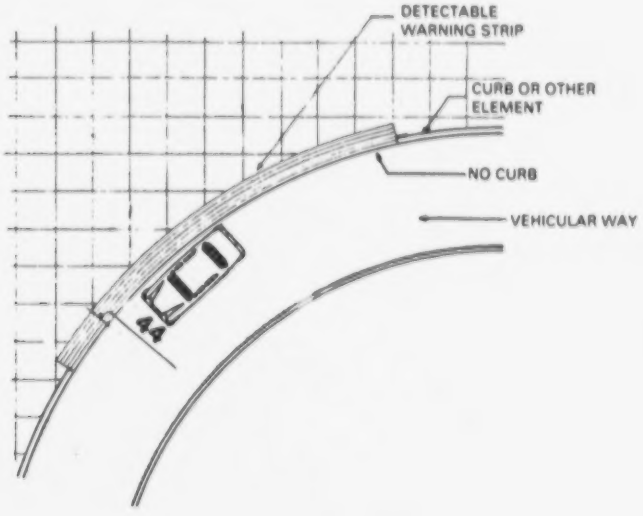


FIG. 67

Detectable Warnings at Reflecting Pools.

The edges of reflecting pools shall be protected by railings, walls, curbs or detectable warnings complying with *Detectable Warnings - Detectable Warnings on Walking Surfaces* section of this manual.

Standardization.

Textured surfaces for detectable warnings shall be standard within a building, facility, site, or complex of buildings.

Special Note: A proliferation of or a lack of standardized warnings weakens the effectiveness of such warnings.

SIGNAGE (ANSI A117.1, 4.28, 1986 and Subsection 553.48(4)(c), F. S.)

General.

All signage that provides emergency information or general circulation directions or identifies rooms and spaces shall comply with *Signage - Character Proportion, Color Contrast,* and *Symbols of Accessibility* sections of this manual. Tactile signage shall also comply with *Signage - Tactile Characters or Symbols* section of this manual.

Special Note: Landmarks that can easily be distinguished by visually impaired individuals are useful as orientation cues.

Many people with disabilities have limitations in movement of their heads and reduced peripheral vision. Thus, signage positioned perpendicular to travel is easiest for them to notice. People can generally distinguish signage within an angle of 30 degrees to either side of the centerline of their faces without moving their heads.

Height.

Where room names or numbers are provided, raised or recessed numbers shall be used. Such names or numbers shall, whenever possible, be located adjacent to the door on the hinge side at a height of between 54 inches and 66 inches from the floor.

Character Proportion.

Letters and numbers on signs shall have a width-to-height ratio between 3:5 and 1:1 and a stroke-width-to-height ratio between 1:5 and 1:10, utilizing an upper-case "X" for measurement.

Color Contrast.

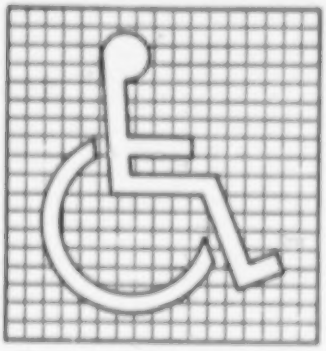
Characters and symbols shall contrast with their background - either light characters on a dark background or dark characters on a light background.

Tactile Characters or Symbols.

Characters, symbols, or pictographs on tactile signs shall be raised 1/32 inch minimum. Raised letters and numbers shall be sans serif uppercase characters. Raised characters or symbols shall be at least 5/8 inch high, but no higher than a nominal 2 inch.

Symbols of Accessibility.

If accessible facilities are identified, then the international symbol of accessibility shall be used. The symbol shall be displayed as shown in Figure 68.



(a) Proportions

(b) Display conditions

FIG. 68

TELEPHONES (ANSI A117.1, 4.29 and Florida Public Service Commission, Florida Administrative Code, Rules Chapter 25-4.0770)

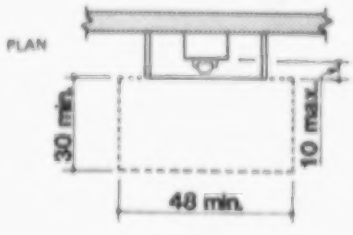
General.

Each telephone station installed after January 5, 1987 shall conform to *Telephones - Clear Floor or Ground Space, Mounting Height, Protruding Objects, Telephone Directories,* and *Cord Length* sections of this manual. Except for locations on floors above or below entry level in buildings not serviced by a ramp or elevator, such stations shall be placed in areas accessible to the physically handicapped.

Clear Floor or Ground Space.

Clear floor or ground spaces at each accessible public telephone shall be at least 30 inches by 48 inches and shall allow either a forward or parallel approach by a person using a wheelchair (see Figure 69). The required clear space shall comply with *Space Allowances and Reach Ranges - Clear Floor or Ground Space for Wheelchairs* section of this manual and shall not be restricted by bases, enclosures, and fixed seats. Public telephones and related equipment shall comply with *Protruding Objects* section of this manual.

NOTE: This dimension represents the height of the highest operable parts that are essential to the basic operation of the telephone.



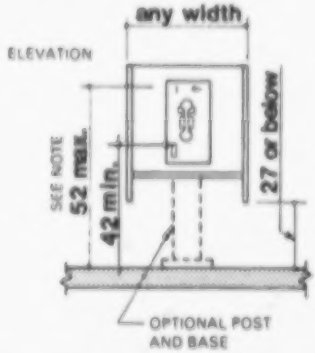
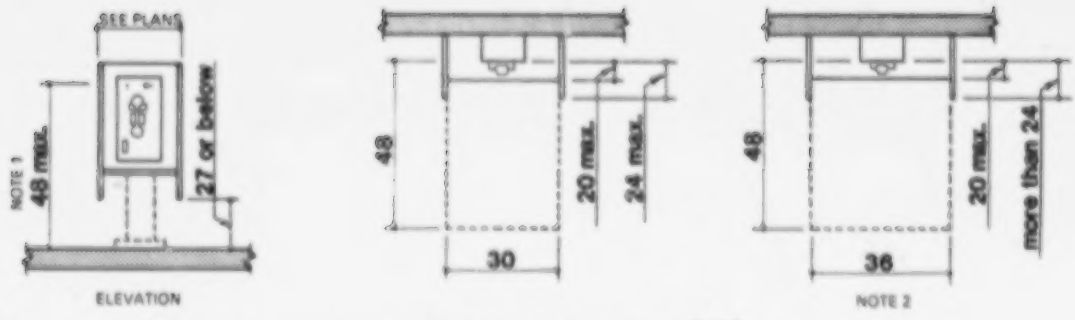


FIG. 69

(a) Side reach possible



NOTES
(1) This dimension represents the height of the highest operable parts that are essential to the basic operations of the telephone.
(2) The required clear floor space increases to 36 in. when the enclosure extends more than 24 in. from the face of the telephone.

(b) Forward reach required

FIG. 69

Mounting Height.
The highest operable parts that are essential to the basic operation of the telephone shall be located within the reach ranges specified in *Space Allowances and Reach Ranges - Front Reach* and *Side Reach* sections of this manual.

Protruding Objects.
Telephones, enclosures, and related equipment shall comply with *Protruding Objects* section of the manual.

Telephone Directories.
Telephone directories, if provided, shall be located in accordance with *Space Allowances and Reach Ranges* section of this manual.

Cord Length.
Accessible telephones shall be equipped with a minimum handset cord length of 29 inches.

FOOD AND LIQUOR SERVICE ESTABLISHMENTS (Section 553.48(6), F. S.)

General.
Public food service establishments and establishments licensed under the Beverage Law for consumption on the premises, which establishments use fixed tables or booths, shall comply with the following (see Figures 70(a) and (b):

1. Aisles adjoining such booths or tables shall provide clear space for wheelchairs.

2. Where there are open positions along both sides of such aisles, the aisles shall be at least 52 inches wide.

3. Where there are open positions along only one side of such aisles, the aisles shall be at least 52 inches wide or there shall be, on the opposite side of such aisles, loose or unfixed tables which can easily be moved.

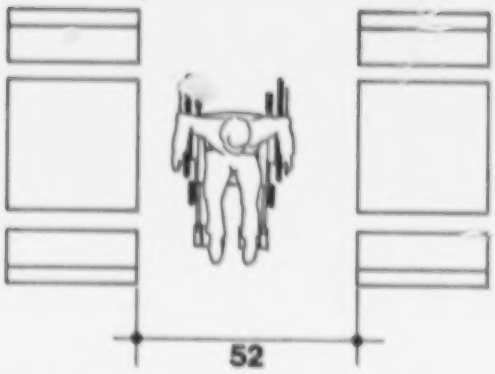
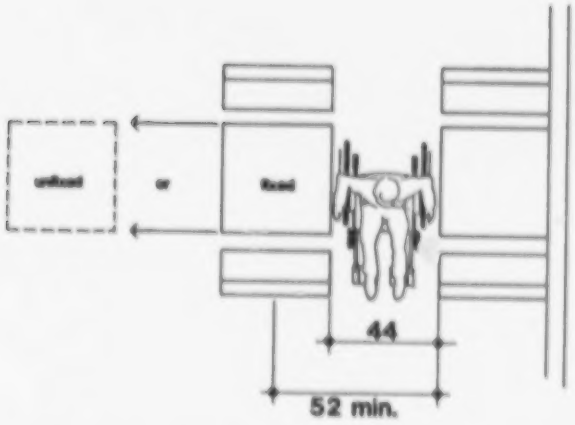


FIG. 70

(a) Open positions both sides of aisle



(b) Open position one side-fixed±44 or Open position both sides-unfixed±52

SEATING, TABLES, AND WORK SURFACES (ANSI A117.1, 4.30, 1986)

General.
Accessible fixed or built-in seating, tables, or work surfaces shall comply with *Seating, Tables, and Work Surfaces* section of this manual.

Seating.
Accessible seating spaces provided at tables, counters, or work surfaces for people in wheelchairs shall have a clear floor space complying with *Space Allowances and Reach Ranges - Clear Floor or Ground Space for Wheelchairs* section of this manual. Such clear floor space shall not overlap knee space by more than 19 inches (see Figure 71).

Knee Clearances.
Accessible seating for people in wheelchairs at tables, counters, and work surfaces shall have knee spaces at least 27 inches high, 30 inches wide, and 19 inches deep (see Figure 71).

Height of Work Surfaces.
The tops of tables and work surfaces shall be from 28 inches

to 34 inches from the floor or ground.

Special Note: Different types of work require different work surface heights for comfort and optimal performance. The principle of a high work surface for light detailed work and a low work surface for heavy manual work also applies for seated persons; however, the limiting condition for seated manual work is clearance under the work surface. Refer to ANSI A117.1, 1986, Table A1 on page 84 for convenient work surface heights for seated persons.

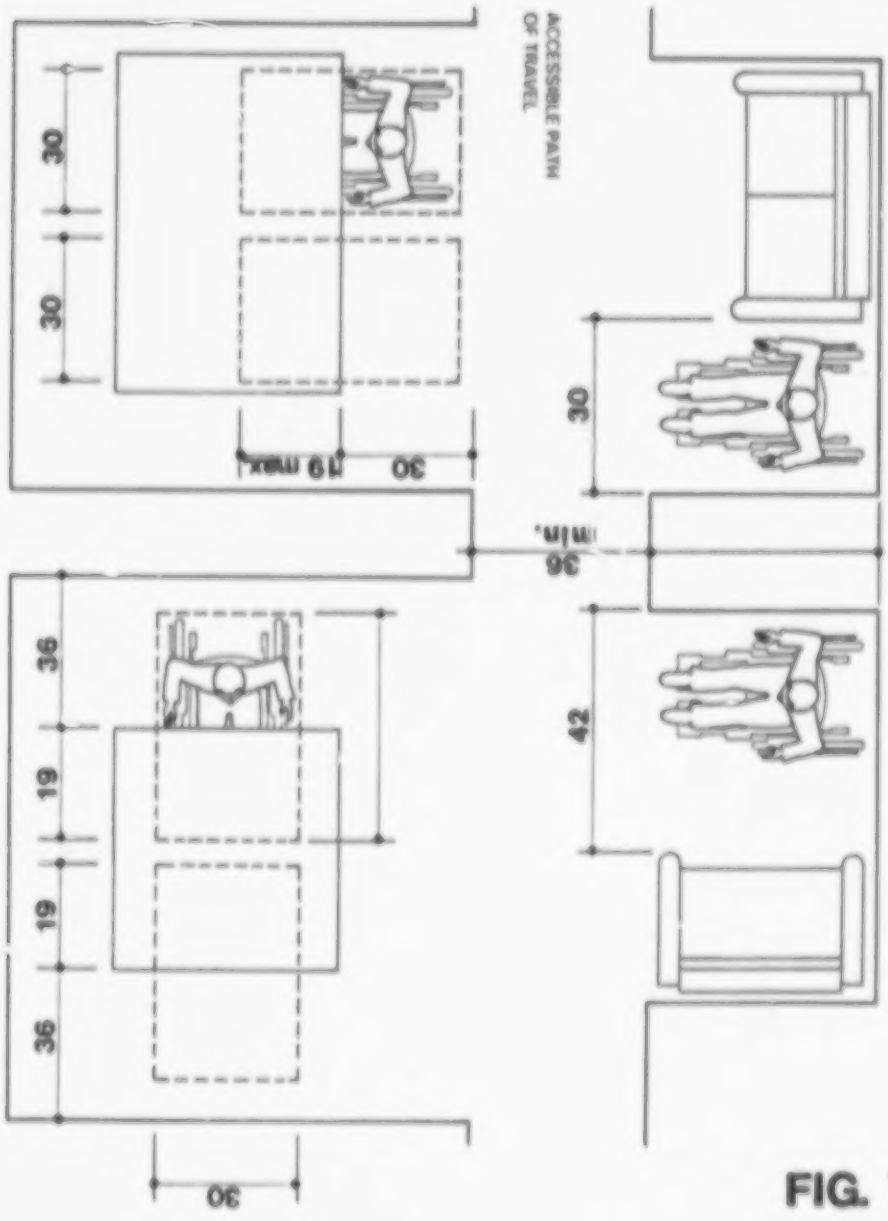


FIG. 71

AUDITORIUM AND ASSEMBLY AREAS (ANSI A117.1, 4.31, 1986 and Subsection 553.48(4)(q), F. S.)

General.

Auditorium and assembly areas shall comply with *Auditorium and Assembly Areas* section of this manual. Such areas with audio-amplification systems shall have a listening system complying with *Listening Systems* portion of this section to assist persons with severe hearing loss in listening to audio presentations.

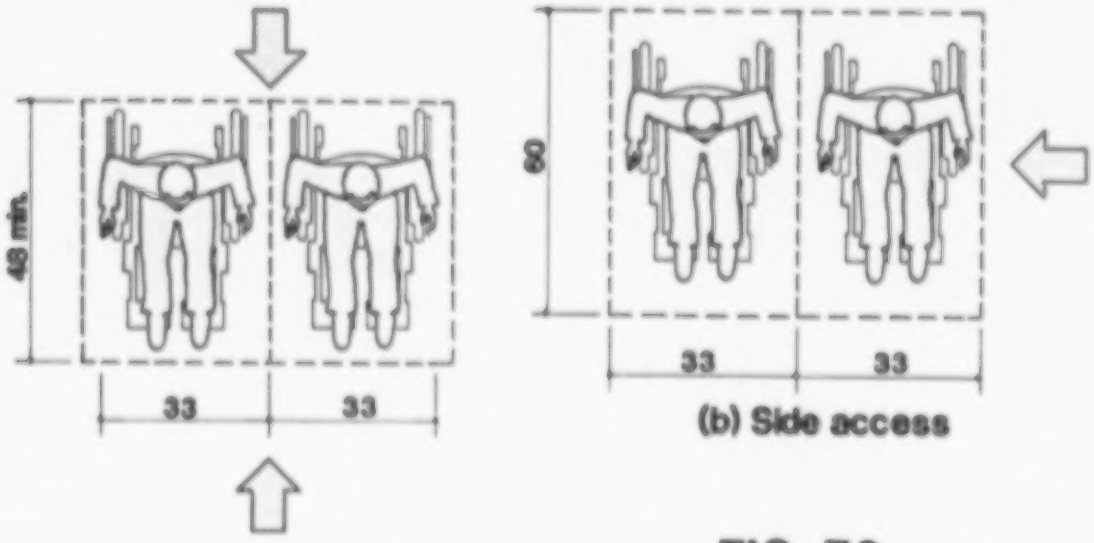


FIG. 72

Size of Wheelchair Locations.

Each wheelchair location shall provide minimum clear ground or floor space at least 30 inches wide by 48 inches long. Such space shall be either clear space or space containing an easily removed portable chair (see Figure 72).

Special Note: Spaces large enough for two wheelchairs allow people who are coming to a performance together to sit together.

Number of Wheelchair Spaces.

Public assembly occupancies with fixed seating arrangements shall provide level viewing or seating positions for wheelchairs in the following amounts:

1. For the first 100 fixed seats, there shall be one such space for each 25 fixed seats or a fraction thereof.

2. For all remaining fixed seats, there shall be one such space for each 100 fixed seats or a fraction thereof. Such space shall be either clear space or space containing an easily removed portable chair. Such space shall be at least 30 inches wide by 48 inches long.

Placement of Wheelchair Locations.

Wheelchair areas shall be an integral part of any fixed seating plan and shall be dispersed through-out the seating area. They shall adjoin an accessible route that also serves as a means of egress in case of emergency and shall be located to provide lines of sight comparable to those for all viewing areas.

Special Note: The location of wheelchair areas can be planned so that a variety of positions within the seating are provided. This will allow choice in viewing and price categories.

Surfaces.

The ground or floor at wheelchair locations shall be level and shall comply with *Ground and Floor Surfaces* section of this manual.

Access to Performing Areas.

An accessible route shall connect wheelchair seating locations with performing areas, including stages, arena floors, dressing rooms, locker rooms, and other spaces used by performers.

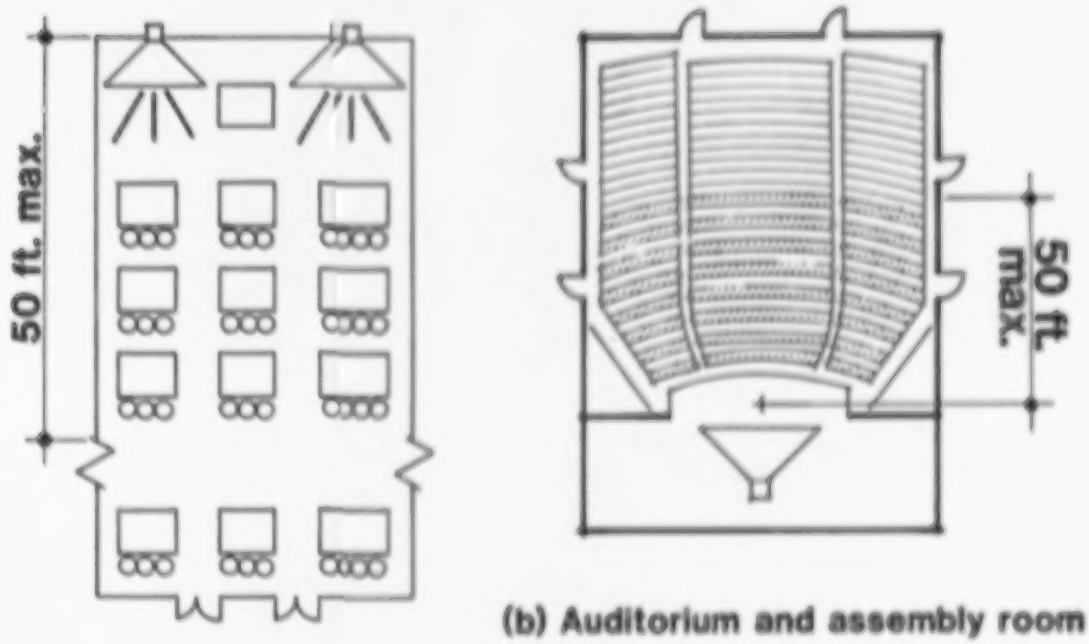
Listening Systems.

1. All theaters, auditoriums, motion-picture houses, exhibition halls, meeting rooms, and passenger rooms, shall provide listening systems to ensure listening access to hearing-impaired persons.

2. Assembly areas with an occupant load of more than 50 persons and an audio amplification system shall provide a permanent assistive system which meets the standards of *Auditorium and Assembly Areas* section of this manual.

3. Assembly areas without an audio amplification system, and spaces used primarily as meeting or conference rooms, shall provide either permanently installed or portable listening systems. Portable systems, if used, may serve only a limited section of the assembly area; that section shall be located within a 50-foot viewing distance of the stage or performing area and shall provide a complete view of the stage or performing area to facilitate lipreading (see Figure 73).

4. Acceptable types of listening systems include, but are not limited to, audio induction loops, radio frequency (AM or FM), infrared transmission, and hard-wired earphones.



(a) Meeting room and conference room

(b) Auditorium and assembly room

FIG. 73

RESIDENTIAL OCCUPANCIES: (Subsection 553.48(8), F. S.)

1. Two-story and tthree-story residential buildings containing more than fouur units which are accessible at grade level, shall not be requuired to comply with this section at floors above such levelss except where an elevator is provided. Living units on accessibble grade levels shall have a 29-inch clear passage to all toilet rooms, bathrooms, kitchens, and walk through openings, but need not otherwise comply with this section.

2. Five percent off all rental apartments shall contain at least one bathroom whichh is fully adaptable, including fixtures, controls, and provision for grab bars as set forth in Section 4.32.4 of American Nationnal Standards Institute A117.1 (1986) and such units shall be locaated at ground level or be accessible by ramp or elevator. Such adaptable units shall be uniformly distributed on all accessible floors.

Special Note: Adapeatability in residential occupancies can be particularly beneficial in rental housing where the demand for accessible units may varyy over time. Residential units designed for adaptability can accommodate either able-bodied residents or residents having physicall disabilities and have the further advantage of allowing thee user to select the degree of accessibility that is desired. For example, an occupant may choose to have grab bars installed in the bathroom but prefer the standard-height counter and sink.

Handicapped people who live in accessible residential units of multifamily buildings or housing projects will want to participate in all on-site social activities, including visiting neighbors in their units. Hence, any circulation paths among all units and among all on-site facilities should be as accessible as possible. An accessible second exit to residential units provides an extra margin of safety in a fire.

Special Note: The Florida Fair Housing Act amended this section of Section 553.48(4) to read:

Covered multifamily dwellings, as defined in Section 760.22, F. S. available for first occupancy on or after March 12, 1991, are subject to the requirements of Subsection 760.23(9)(c), F. S. relating to design and construction for handicapped accessibility.

The specific requirements of Subsection 760.23(9)(c), F. S. can be found in Appendix C, 9., of this manual.

3. Single-family houses, duplexes, triplexes, condominiums, and townhouses shall provide at least one bathroom, located with maximum possible privacy, where bathrooms are provided on habitable grade levels, with a door that has a 29-inch clear opening.

4. All other bathrooms, toilet rooms, and walk-through openings on the habitable grade level may provide a 29-inch clear opening, if there is sufficient wall width space to accommodate this opening.

5. All residential occupancies, except for detached single-family homes, shall comply with this section as to accessibility to accessory facilities, including pools, patios, sound rooms, recreational areas and buildings, laundry rooms, and similar common areas.

6. In motels and hotels, at least 5 percent of the guest rooms shall provide the following special accessibility features as required by this section:

a. **Grabrails**

Grabrails in bathrooms and toilet rooms shall be located 33 inches from and parallel to the finished floor, measured vertically to the top of the rail, with a variation not to exceed 1/2 inch.

b. **Water Closets**

All standard water closet seats shall be at a height of 15 inches, measured vertically from the finished floor to the top of the seat with a tolerance of plus or minus 1/2 inch. A portable or attached raised toilet seat shall be provided in all designated handicapped accessible rooms.

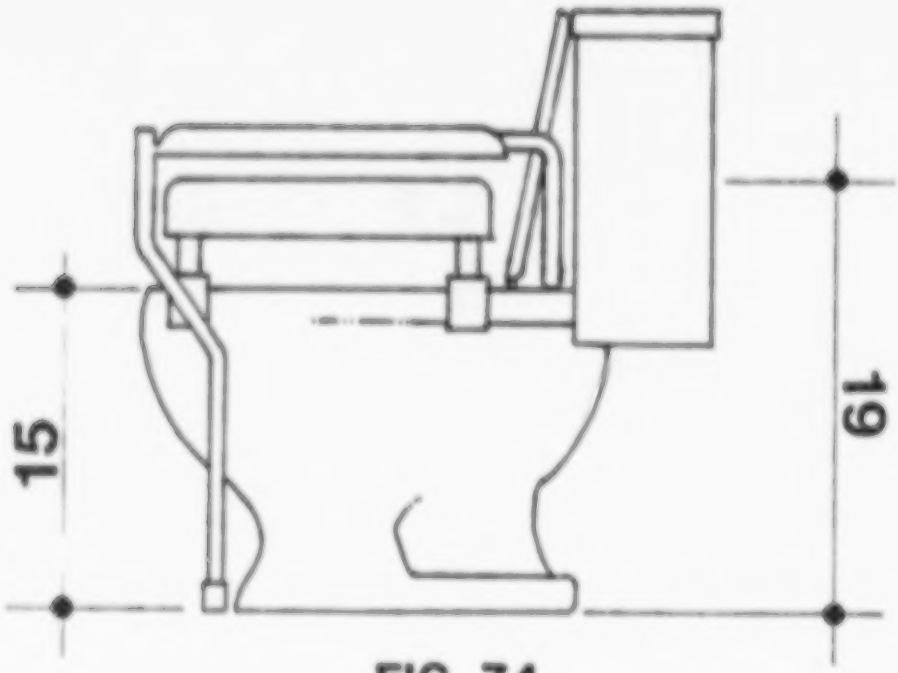


FIG. 74

c. **Showers**

All such designated rooms shall have a 60 inch by 30 inch roll-in shower, and there shall also be a fold-down seat in the shower of such designated rooms and said seat shall conform to *Grab Bars, and Tub and Shower Seats* section of this manual. All such designated rooms shall have in the 60 inch by 30 inch shower: shower curtains, grabrails, and accessible shower head controls. There shall be no curbs at shower entrances.

d. **Mirrors, Lavatories, and Switches**

Rooms shall have accessible mirrors, lavatories, and control switches as set forth in *Lavatories, Sinks, and Mirrors and Controls* and *Operating Mechanisms* sections of this manual.

e. **Toilet Rooms**

The toilet room shall be at least 68 inches by 68 inches. The toilet room door shall not swing into the toilet room.

f. **Beds**

All beds in designated accessible guest rooms shall be open-frame type to permit passage of lift devices.

EXCEPTIONS FROM ACCESSIBILITY REQUIREMENTS (Subsection 553.48(5), F. S.)

1. If the owner of the building certifies that particular areas of the building are used only by employees and that the work performed in such areas cannot reasonably be performed by handicapped persons, such areas are exempt from this section unless they provide the only means of access from one area normally used by handicapped persons to another such area.

2. The second story of a building which is used other than for retail or office use, or which is used for retail or office use by a single tenant, shall be deemed to be in compliance with this section and need not be accessible when:

a. The owner of the building provides an affidavit that the building will not be occupied for retail or office use or that the building will be occupied by a single tenant. The affidavit must be maintained on file with the certificate of use and occupancy for the building.

b. The building provides accessibility at the habitable grade level in accordance with this section.

c. All building facilities and services normally sought and used by the general public or employees working in the building are accessible to, and usable by, the physically handicapped at habitable grade level.

d. There is no elevator in the building.

3. Wheelchair lifts may be used to provide accessibility to and within buildings and structures.

MODIFICATIONS AND WAIVERS (Section 553.49, F. S.)

1. The Florida Board of Building Codes and Standards shall provide by regulation criteria for granting individual modifications of, or exceptions from, the literal requirements of this part upon a determination of unnecessary or extreme hardship, provided such waivers shall not violate federal accessibility laws and regulations and shall be reviewed by an advisory committee consisting of the following seven members, who shall be knowledgeable in the area of handicapped accessibility. The Secretary of Community Affairs shall appoint the following:

a. A representative from the Advocacy Center for Persons with Disabilities, Inc.

b. A representative from the Division of Blind Services.

c. A representative from the Division of Vocational Rehabilitation.

d. A representative from a statewide organization representing the physically handicapped.

e. A representative from the hearing impaired.

f. A representative from the President, Florida Council of Handicapped Organizations.

g. A representative of the Paralyzed Veterans of America.

2. The term of service of any member of the committee shall be for a period of 2 years, subject to reappointment. Any member of the committee may be replaced by the secretary upon three unexcused absences. Upon application made in the form provided, an individual waiver or modification may be granted by the board so long as such modification or waiver is not in conflict with more stringent standards provided in another chapter.

3. Meetings of the advisory committee shall be held in conjunction with the regular meetings of the board.

ENFORCEMENT (Section 553.495, F. S.)

It shall be the responsibility of each local government and each code enforcement agency established pursuant to Section 553.80, Florida Statutes to enforce the provisions of this part. This act expressly preempts the establishment of handicapped accessibility standards to the state and supersedes any county or municipal ordinance on the subject. However, nothing in this section shall prohibit municipalities and counties from enforcing the provisions of this act.

Effective Date

This law shall take effect January 1, 1990.

APPENDIX A

Chapter 553, Part V, Florida Statutes,
"Accessibility by Handicapped Persons"

553.48 Accessibility features required of new buildings and buildings being altered or having a change in use; exceptions.

553.49 Modifications and waivers; advisory committee.

553.495 Enforcement.

553.48 Accessibility features required of new buildings and buildings being altered or having a change in use; exceptions.--

(1) The accessibility standards adopted herein shall be applicable to all new construction, including factory-built buildings, substantial improvements, alterations, additions, and changes in occupancy as follows:

(a) All new construction except as exempt herein.

(b) Existing buildings which are substantially improved shall be made to comply with the provisions of this part for new construction.

(c) Each element or space of a building or facility that is altered shall comply to the extent it is altered with the applicable provisions of American National Standards Institute A117.1 - 1986 unless structurally impracticable.

(d) These provisions shall apply to buildings and facilities designated as historic structures that undergo alterations or a change in use groups.

(e) When the use of the building changes, only the doors, entrances, floors, exits, and required public toilet rooms must conform to the requirements of this section.

(2) Any building which was under construction contract entered into on or after October 1, 1974, but before January 1, 1990, shall comply with the laws relating to accessibility as such laws existed at the time the contract was entered into.

(3) All buildings subject to this section which may be frequented, lived in, or worked in by the public shall comply with this section.

(4) (a) As used in this section:

1. "Addition" means an expansion, extension, or increase in the usable space within a building or facility.

2. "Alteration" means a change or rearrangement, within buildings or facilities, in the structural parts or elements, or in the means of egress, or in moving from one location to another. Alteration does not include normal maintenance and repair, reroofing, interior wall and ceiling finishes, or changes to plumbing, mechanical, or electrical systems.

3. "Existing building" means any building or structure constructed, under design or construction, or under construction contract prior to January 1, 1990.

4. "New construction" means new construction, erection, alteration, rehabilitation, or repair which was not in existence, under design or construction, or under construction contract on or prior to January 1, 1990.

5. "Replacement value" means the actual cost to replace or rebuild the same structure at a given period of time.

6. "Substantial improvement" means any repair, alteration, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the replacement value of the structure either:

a. Before the repair or improvement is started; or

b. If the structure has been damaged and is being restored, before the damage occurred.

7. "Level" means a surface the slope of which does not exceed 1/4 inch vertically for each 14 inches horizontally.

8. "Restroom" means a multiple-station sanitary facility having two or more toilet compartments or stalls in any combination.

9. "Toilet room" means a single-station sanitary facility having at least one water closet.

10. "Walkway" means the accessible route, on private property, in front of one or a series of single tenant occupancies. Such walkway serves accessible entrance doors. Such walkway shall be considered part of the building.

(b) 1. Accessibility to buildings shall be provided from rights-of-way and parking areas by means of walks, curb-cuts, or ramps to at least one entrance generally used by the public and from such entrance to elevators, if any. Such pathways shall be at least 44 inches wide and shall be devoid of stairs/steps or other abrupt changes in elevation greater than 1/2 inch.

2. Accessibility in buildings shall be provided at each floor and accessible grade level, except as otherwise provided in this section.

(c) 1. Interior corridors shall conform to all applicable requirements and shall be at least 44 inches wide when part of a required means of egress. Other interior aisles, corridors, and hallways shall be at least 36 inches wide.

2. Where the configuration of a corridor, aisle, or hallway requires the making of 180-degree turns, accessibility shall be provided by a space of at least 60 inches in diameter, a space of at least 52 inches by 72 inches, or an alternate configuration as set forth in American National Standards Institute specification A117.1 (1986).

(d) Floors shall have a slip-resistant finish.

(e) 1. Walkways shall be at least 48 inches wide.

2. Where doors swing out over a continuous walkway which runs perpendicular to the path of egress, the walkway shall be at least 60 inches wide.

3. Walkways shall be of a continuing common plane not interrupted by steps or abrupt changes in level.

4. Walkways that are grade level leading to entrance doors shall have a level platform of at least 60 inches by 60 inches if the door swings out. The platform shall extend at least 24 inches beyond the latch side of the door. Above grade level, platforms shall have security rails or walls. If the door swings in, the platform shall be at least 60 inches wide by 36 inches deep.

(f) All floors on a particular story of a building shall be of a common level or be connected by a ramp or by inclined or vertical wheelchair lifts that are operable by a disabled person and conform to Chapter 399, Florida Statutes.

(g) Ramps shall conform to the following requirements:

1. Ramps shall have a slip-resistant surface.

2. Ramps that are part of a required means of egress or are used by handicapped persons shall be at least 44 inches wide.

3. Ramps 30 feet in length or longer shall have a maximum gradient of 1:20 or the ramps shall have a level, platform at least 60 inches deep in the direction of the ramp at 30-foot intervals and at changes in direction over 15 degrees and shall be of a slope of no more than 1:12.

4. Ramps shall have a level platform at the top which is at least 60 inches wide by 60 inches deep, except as specified in this section. If the door swings out onto the platform, the platform shall extend at least 24 inches beyond the latch side of the door. If the doors swing in, the level platform shall be at least 36 inches deep and 60 inches wide. All above-grade-level platforms shall have security rails or walls.

5. The bottom of each ramp shall have at least 72 inches of straight and level clearance.

6. a. Ramps shall have smooth handrails on both sides which are 32 inches above the upper surface of the ramp, measured vertically to the top of the rail, allowing a variation of not more than 1/2 inch. Handrails on ramps shall be 1 1/2 inches round in outside diameter. Handrails that are not continuous between flights shall be extended horizontally at least 18 inches at the required height at the top and bottom landings if a guard or wall exists.

b. Ramps or curb-cuts from parking areas that are privately owned, to the walkway level, shall be provided and if more than one is provided, shall be spaced along such walkways at intervals of no more than 100 feet and such ramps or curb-cuts shall be located as close as practical to main entrances and exits to buildings.

7. Handrails shall not be required on ramps 84 inches or less in length that are not integral to a walkway, platform, courtyard, or other paved area and if the sides of the ramp are protected with built-up curbs or flared sides.

8. Handrails are not required on curb-cuts with flared sides.

9. Curb-cuts used in lieu of ramps shall have a maximum rise of 8 inches. If a curb-cut is located where pedestrians must walk across it, it shall have flared sides. The maximum slope of the flare shall not exceed 1 inch vertically for each 10 inches horizontally with respect to inclined curbs, or 1 inch vertically for each 12 inches horizontally for built-up curbs. Curb-cuts shall have a level platform at the top of at least 36 inches by 36 inches.

(h) Steps in stairs that require use by handicapped persons or aged persons shall not have abrupt or square nosing. Stairs shall have handrails which are 32 inches above the upper surface of the tread, measured vertically from the tread at the leading edge, allowing a variation of not more than 1/2 inch. Handrails that are not continuous between flights shall be extended horizontally at least 18 inches at the required height at the top and bottom landings where a guard or wall exists.

(i) Required doors and walk-throughs shall comply with the following requirements:

1. Single-leaf walk-through swinging doors and at least one leaf of manually operated multiple-leaf swinging doors shall be at least 32 inches wide.

2. All walk-through openings shall have at least 29 inches of clear width.

3. Handrails, pulls, locksets, and other operating mechanisms on entrance doors, restroom and toilet room doors, and other mechanisms or U-shaped handles shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. This requirement shall be satisfied by the 5 pound feet standard as described in American National Standards Institute (1986) 4.13.11.

4. A door that is not intended for regular use and that could prove dangerous if used by a blind person shall have a knurled handle or knob or a handle or knob coated with an abrasive plastic coating. Such doors shall also have warning signs as provided in this section.

5. Maneuvering clearances at doorways shall be unobstructed.

6. If a side-hinged swinging door is double-acting, there shall be at least 3 inches of horizontal clearance on the latch side both inside and outside the doorway. If an exterior side-hinged swinging door swings one way, there shall be, on the latch side, at least 24 inches of horizontal clearance on the pull side and at least 3 inches of horizontal clearance on the push side. There shall be, on the latch side of the interior side-hinged swinging doors, at least 12 inches of horizontal clearance on the pull side of the door.

7. All doors shall be openable by a single effort. The maximum force required to open a door shall be as follows, except that such requirements do not apply to the effort required to retract latch bolts or disengage other devices which keep the door closed for safety reasons:

a. Exterior swinging doors shall be openable by a force of not more than 8.5 pounds applied to the latch stile.

b. Interior swinging doors shall be openable by a force of not more than 5 pounds applied to the latch stile.

c. Sliding or folding doors shall be openable by a force of not more than 5 pounds.

(j) 1. Except as otherwise provided in this subsection, posts, bars, railings, and other similar barricades or pedestrian control devices shall not be placed in the common or emergency entranceways or exitways of buildings or in the exterior sidewalks, walkways, or other public paths serving them which are located on private property.

2. Interior or exterior turnstiles are prohibited, except that, in occupancies serving over 100 persons, turnstiles may be used if there is available an alternate adjacent means of passage, unlocked, with operating mechanisms as set forth in this section, which provides at least 32 inches of clearance.

3. For new construction permits issued after January 1, 1995, one check-out aisle must have 32 inches of clear passage and all other check-out aisles shall have 29 inches of clear passage.

4. For remodeling or new construction permits issued after July 1, 1990, two check-out aisles must have 32 inches of clear passage. This shall not apply to any stores built after January 1, 1995.

5. Any store with less than 4 check-out aisles shall have one check-out station with at least 32 inches of clear passage.

(k) Required restrooms and toilet rooms shall comply with the following requirements:

1. Each restroom and toilet room shall have a minimum clear passage of at least 36 inches to the accessible toilet stall. If turns of 45 degrees or more are required, this passageway shall be at least 44 inches wide.

2. The accessible toilet stall shall be at least 68 inches by 68 inches and contain an accessible lavatory within it.

3. The accessible water closet shall be located in the corner diagonal to the stall door.

4. The stall door shall be located in the wall adjacent to the accessible lavatory, as far from the lavatory as

possible. The accessible stall door shall swing out and shall be at least 32 inches wide and shall be of the self-closing type. Such lavatories shall be counted as part of the required fixture count for the building.

5. a. Accessible lavatories shall have lever operated faucets and narrow aprons which, when mounted at a height of from 28 inches to 34 inches, measured vertically from the floor to the bottom of the apron, allow for use of the lavatory by persons in wheelchairs.

b. Hot water and drain pipes under lavatories or sinks shall be insulated or otherwise protected. There shall be no sharp or abrasive surfaces under lavatories or sinks.

6. At a location adjacent to accessible lavatories there shall be at least one towel dispenser within the toilet stall or toilet room.

7. Accessible water closet seats shall be at a height of no less than 19 inches and no more than 20 inches, measured vertically from the finished floor to the top of the seat.

8. A grabrail shall be provided, located 33 inches from and parallel to the finished floor, measured vertically to the top of the rail with a variation of not more than 1/2 inch, and:

a. Shall have an outside diameter of 1 1/2 inches.

b. Shall provide 1 1/2 inches of clearance between the rail and the wall.

c. Shall be so designed and supported as to withstand a load of not less than 250 pounds applied at any point, downward or horizontally.

d. Shall be continuously graspable along the entire length.

e. Shall be at least 24 inches long and shall be centered at the leading edge of the water closet.

9. Restrooms shall have an unobstructed space of at least 60 inches in diameter or 52 inches by 72 inches finished inside dimension adjacent to the lavatory area.

10. Restroom vestibules having a series of doors shall have an unobstructed width of at least 52 inches and unobstructed depth of at least 72 inches finished inside dimensions.

a. The inside door must swing into the restroom.

b. There must be at least 12 inches of clear space on the latch side of the door, unless the door is double-acting.

(l) Switches and controls for light, heat, ventilation, windows, and draperies, and all other controls of frequent and essential use, shall be placed between 42 inches and 52 inches from the floor.

(m) Where water fountains or other means of dispensing water are provided, at least one such fountain or device shall be accessible and shall have upfront spouts and either hand-operated or hand-and-foot-operated controls.

(n) In retail occupancies providing changing rooms for the public, at least one changing room shall:

1. Provide an opening of at least 29 inches clear width.

2. Have unobstructed finished inside dimensions of at least 36 inches wide by 60 inches deep.

3. If a door is provided, have a door that swings out.

(o) Where room names or numbers are provided, raised or recessed numbers shall be used. Such names or numbers shall, whenever possible, be located adjacent to the door on the hinge side at a height of between 54 inches and 66 inches from the floor.

(p) Where warning signals are used, audible signals shall be accompanied by visual signals for the benefit of the hearing-impaired, and visual signals shall be accompanied by audible signals for the benefit of the blind.

(q) All theaters, auditoriums, motion-picture houses, exhibition halls, meeting rooms, and passenger rooms, shall provide listening systems to ensure listening access to hearing-impaired persons. Assembly areas with an occupant load of more than 50 persons and an audio amplification system shall provide a permanent assistive system which meets the standards of the American National Standards Institute. Assembly areas without an audio amplification system, and spaces used primarily as meeting or conference rooms, shall provide either permanently installed or portable listening systems. Portable systems, if used, may serve only a limited section of the assembly area; that section shall be located within a 50-foot viewing distance of the stage or performing area to facilitate lipreading. Acceptable types of listening systems include, but are not limited to, audio

induction loops, radio frequency (AM or FM), and infrared transmission.

(5) (a) If the owner of the building certifies that particular areas of the building are used only by employees and that the work performed in such areas cannot reasonably be performed by handicapped persons, such areas are exempt from this section unless they provide the only means of access from one area normally used by handicapped persons to another such area.

(b) The second story of a building which is used other than for retail or office use, or which is used for retail or office use by a single tenant, shall be deemed to be in compliance with this section and need not be accessible when:

1. The owner of the building provides an affidavit that the building will not be occupied for retail or office use or that the building will be occupied by a single tenant. The affidavit must be maintained on file with the certificate of use and occupancy for the building.

2. The building provides accessibility at the habitable grade level in accordance with this section.

3. All building facilities and services normally sought and used by the general public or employees working in the building are accessible to, and usable by, the physically handicapped at habitable grade level.

4. There is no elevator in the building.

(c) Wheelchair lifts may be used to provide accessibility to and within buildings and structures.

(6) Public food service establishments and establishments licensed under the Beverage Law for consumption on the premises, which establishments use fixed tables or booths, shall comply with the following:

(a) Aisles adjoining such booths or tables shall provide clear space for wheelchairs.

(b) Where there are open positions along both sides of such aisles, the aisles shall be at least 52 inches wide.

(c) Where there are open positions along only one side of such aisles, the aisles shall be at least 52 inches wide or there shall be, on the opposite side of such aisles, loose or unfixed tables which can easily be moved.

(7) Public assembly occupancies with fixed seating arrangements shall provide level viewing or seating positions for wheelchairs in the following amounts:

(a) For the first 100 fixed seats, there shall be one such space for each 25 fixed seats or a fraction thereof.

(b) For all remaiming fixed seats, there shall be one such space for each 100 fixedi seats or a fraction thereof. Such space shall be either clear sspace or space containing an easily removed portable chair. Such space shall be at least 30 inches wide by 48 inches long.

(8) (a) Two-story and three-story residential buildings containing more than four units which are accessible at grade level, shall not be required to comply with this section at floors above such levels except where an elevator is provided. Living units on accessible grade levels shall have a 29-inch clear passage to all toilet rooms, bathrooms, kitchens, and walk-through openings, but need not otherwise comply with this section.

(b) Five percent of all rental apartments shall contain at least one bathroom which is fully adaptable, including fixtures, controls, and provision for grab bars as set forth in s. 4.32.4 of American National Standards Institute A117.1 (1986) and such units shall be located at ground level or be accessible by ramp or elevator. Such adaptable units shall be uniformly distributed on all accessible floors.

(c) Single-family houses, duplexes, triplexes, condominiums, and townhouses shall provide at least one bathroom, located with maximum possible privacy, where bathrooms are provided on habitable grade levels, with a door that has a 29-inch clear opening.

(d) All other bathrooms, toilet rooms, and walk-through openings on the habitable grade level may provide a 29-inch clear opening, if there is sufficient wall width space to accommodate this opening.

(e) All residential occupancies, except for detached single-family homes, shall comply with this section as to accessibility to accessory facilities, including pools, patios, sound rooms, recreational areas and buildings, laundry rooms, and similar common areas.

(f) In motels and hotels, at least 5 percent of the guest rooms shall provide the following special accessibility features as required by this section:

1. Grabrails in bathrooms and toilet rooms shall be located 33 inches from and parallel to the finished floor, measured vertically to the top of the rail, with a variation not to exceed 1/2 inch.

2. All standard water closet seats shall be at a height of 15 inches, measured vertically from the finished floor to the top of the seat with a tolerance of plus or minus 1/2

inch. A portable or attached raised toilet seat shall be provided in all designated handicapped accessible rooms. All such designated rooms shall have a 60 inch by 30 inch roll-in shower, and there shall also be a fold-down seat in the shower of such designated rooms and said seat shall conform to American National Standards Institute A117.1 (1986). All such designated rooms shall have in the 60 inch by 30 inch shower: shower curtains, grabrails, and accessible shower head controls. There shall be no curbs at shower entrances.

3. Rooms shall have accessible mirrors, lavatories, and control switches as set forth in American National Standards Institute A117.1 (1986).

4. The toilet-room shall be at least 68 inches by 68 inches.

5. All beds in designated accessible guest rooms shall be open-frame type to permit passage of lift devices.

6. The toilet room door shall not swing into the toilet room.

553.49 Modifications and waivers; advisory committee.--

(1) The Florida Board of Building Codes and Standards shall provide by regulation criteria for granting individual modifications of, or exceptions from, the literal requirements of this part upon a determination of unnecessary or extreme hardship, provided such waivers shall not violate federal accessibility laws and regulations and shall be reviewed by an advisory committee consisting of the following seven members, who shall be knowledgeable in the area of handicapped accessibility. The Secretary of Community affairs shall appoint the following: a representative from the Advocacy Center for Persons with Disabilities, Inc.; a representative from the Division of Blind Services; a representative from the Division of Vocational Rehabilitation; a representative from a statewide organization representing the physically handicapped; a representative from the hearing impaired; and a representative from the President, Florida Council of Handicapped Organizations; and a representative of the Paralyzed Veterans of America. The term of service of any member of the committee shall be for a period of 2 years, subject to reappointment. Any member of the committee may be replaced by the secretary upon three unexcused absences. Upon application made in the form provided, an individual waiver or modification may be granted by the board so long as such modification or waiver is not in conflict with more stringent standards provided in another chapter.

(2) Meetings of the advisory committee shall be held in conjunction with the regular meetings of the board.

553.495 Enforcement.--

It shall be the responsibility of each local government and each code enforcement agency established pursuant to s. 553.80 to enforce the provisions of this part. This act expressly preempts the establishment of handicapped accessibility standards to the state and supersedes any county or municipal ordinance on the subject. However, nothing in this section shall prohibit municipalities and counties from enforcing the provisions of this act.

APPENDIX B

Mandatory Portions of American National Standards Institute, "For Buildings and Facilities, ANSI A117.1, 1986, Providing Accessibility and Usability for Physically Handicapped People."

A large portion of the text and illustrations were taken from this standard with permission from the American National Standards Institute. The mandatory portions are those containing the word "shall". Copies of the standard, ANSI A117.1, 1986 may be obtained from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018.

APPENDIX C

Related Handicapped Legislation

1. Manufactured Building Act of 1979, Chapter 553, Part IV, Florida Statutes.

Florida Administrative Code, Rules Chapter 9B-1.004(11) Accessibility Standards - Manufactured buildings shall comply with Chapter 553, Part V, Florida Statutes.

2. State Uniform Traffic Control, Sections 316.1955, 1956, 1957, 1958, 1959, 1964, Subsection 318.18(7), and Sections 320.0842, 0843, 0845, and 0848, Florida Statutes.

316.1955 Parking spaces provided by governmental agencies for certain disabled persons. -

(1) Each state agency and political subdivision having jurisdiction over street parking or publicly owned and operated parking facilities shall provide a minimum number of specially designed and marked motor vehicle parking spaces for the exclusive use of those severely physically disabled individuals who have permanent mobility problems that substantially impair their ability to ambulate and who have been issued an exemption

entitlement parking permit pursuant to s. 316.1958 or s. 320.0848.

(2) The following minimum number of such parking spaces shall be provided:

(a) One space in the immediate vicinity of a building which houses a governmental entity or a political subdivision, including, but not limited to, state office buildings and courthouses, if no parking for the public is provided on the premises of such building;

(b) One space for each 150 metered onstreet parking spaces; and

(c) For publicly maintained and operated parking facilities intended for public use and not subject to paragraph (a), the number of parking spaces for disabled persons as set forth in the following table:

Total Parking in Lot	Required Number of Accessible Spaces
Up to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2% of total
over 1000	20 plus 1 for each 100 over 1000

However, when parking spaces are leased at such publicly maintained and operated parking facilities, the number of parking spaces for disabled persons shall be increased or decreased on demonstrated and documented need. A minimum of four parking spaces for disabled persons shall be provided at a physical restoration rehabilitation center or a hospital.

(3) Such parking spaces shall be designed and located as follows:

(a) All spaces shall have accessible thereto a curb-ramp or curb-cut, when necessary to allow access to the building served, and shall be located so that users will not be compelled to wheel behind parked vehicles.

(b) Diagonal or perpendicular parking spaces shall be a minimum of 12 feet wide.

(c) Parallel parking spaces shall be located either at the beginning or end of a block or adjacent to alley entrances. Curbs adjacent to such spaces shall be of a height which will not interfere with the opening and closing of motor vehicle doors.

(4) Each such parking space shall be prominently outlined with paint and posted with a permanent above-grade sign of a color and design approved by the Department of Transportation, bearing the international symbol of accessibility and the caption "PARKING BY DISABLED PERMIT ONLY."

(5) It is unlawful for any person to stop, stand, or park a vehicle within any such specially designated and marked parking space provided in accordance with this section, unless such vehicle displays a parking permit issued pursuant to s. 316.1958 or s. 320.0848, and such vehicle is transporting a person eligible for the parking permit. Whenever a law enforcement officer or a parking enforcement specialist finds a vehicle in violation of this subsection, that officer shall:

(a) Have the vehicle in violation removed to any lawful parking space or facility or require the operator or other person in charge of the vehicle immediately to remove the unauthorized vehicle from the parking space. Whenever any vehicle is removed by a law enforcement office, parking enforcement specialist, or agency to a storage lot, garage, or other safe parking space, the cost of such removal and parking shall be a lien against the vehicle.

(b) Charge the operator or other person in charge of the vehicle in violation with a noncriminal traffic infraction, punishable as provided in s. 316.008(4) or s. 318.18(2). However, any person who is chauffeuring a disabled person shall be allowed, without need for any identification parking permit, momentary parking in any such parking space, for the purpose of loading or unloading such disabled person. No penalty shall be imposed upon the driver for such momentary parking.

316.1956 Parking spaces provided by nongovernmental entities for certain disabled persons. -

(1) Any commercial real estate property owner offering parking for the general public shall provide specially designed and marked motor vehicle parking spaces for the exclusive use of physically disabled persons who have been issued parking permits pursuant to s. 316.1958 or s. 320.0848. The minimum number of such parking spaces shall be as provided in s. 316.1955(2)(c).

(2) Each such parking space shall conform to the requirements of s. 316.1955(3), shall be conspicuously outlined in blue paint, and shall be posted and maintained with a permanent, above-grade sign bearing the international symbol of accessibility or the caption "PARKING BY DISABLED PERMIT ONLY," or bearing both such symbol and caption. All handicapped parking

spaces must be signed and marked in accordance with the standards adopted by the Department of Transportation.

(3) Any person who parks a vehicle in any parking space designated with the international symbol of accessibility or the caption "PARKING BY DISABLED PERMIT ONLY," or with both such symbol and caption, is guilty of a traffic infraction, punishable as provided in s. 316,008(4) or s. 318.18(7), unless such vehicle displays a parking permit issued pursuant to s. 316.1958 or s. 320.0842, s. 320.0843, s. 320.0845, or s. 320.0848 and such vehicle is transporting a person eligible for such parking permit. However, any person who is chauffeuring a disabled person shall be allowed , without need for an identification parking permit, momentary parking in ay such parking space for the purpose of loading or unloading a disabled person. No penalty shall be imposed upon the driver for such momentary parking.

(4) Any law enforcement officer or parking enforcement specialist shall enforce the provisions of subsection (3).

316.1957 Parking violation; designated handicapped parking spaces.

Whenever evidence shall be presented in any court of the fact that any automobile, truck, or other vehicle was found to be parked in a properly designated handicapped parking space in violation of the provisions of s. 316.1955 or s. 316.1956, it shall be prima facie evidence that the vehicle was parked and left in the space by the person, firm or corporation in whose name the vehicle is registered and licensed according to the records of the Division of Motor Vehicles.

316.1958 Out-of-state vehicles bearing handicapped identification.

Motor vehicles displaying a special license plate or parking permit issued to a handicapped person by any other state or district subject to the laws of the United States shall be recognized as a valid license plate or permit, allowing such vehicle the special parking privileges allowed pursuant to the provisions of ss. 316.1955 and 316.1956, provided such other state or district grants reciprocal recognition for handicapped residents of this state.

316.1959 Handicapped parking enforcement.

The provisions of handicapped parking shall be enforced by state, county and municipal authorities in their respective jurisdictions whether on public or private property in the same manner as is used to enforce other parking laws and ordinances by said agencies.

316.1964 Exemption of vehicles transporting certain disabled persons from payment of parking fees and penalties.

No state agency, county, municipality, or any agency thereof, shall exact any fee for parking on the public streets or highways or in any metered parking space from the driver of a vehicle which displays a parking permit issued pursuant to s. 320.0840 or a license plate issued pursuant to s. 320.084 or s. 320.0842 if such vehicle is transporting a person eligible for such parking permit or license plate; nor shall the driver of such a vehicle transporting such a person be penalized for parking, except in clearly defined bus loading zones, fire zones, or in areas posted as "No Parking" zones.

318.18 Amount of civil penalties.

The penalties required for a noncriminal disposition pursuant to s. 318.14(1), (2), and (4) are as follows:

(7) One hundred dollars for illegally parking in a parking space provided for disabled persons under s. 316.1955 or s. 316.1956.

320.0842 Free motor vehicle license plates to veterans confined to wheelchairs.

(1) Upon application by any person who owns or leases a motor vehicle and who is qualified under subsection (2), the department shall issue to such person a free motor vehicle license plate, similar in all respects to the plate issued under s. 320.084, with the exception that the designation "DV" shall be replaced by a series designation which shall be internationally accepted wheelchair symbol. The internationally accepted wheelchair symbol is as follows:

(2) In order to be eligible for the motor vehicle license plate described in subsection (1), a person must comply with the following provisions:

(a) The veteran must be eligible for the license plate issued under s. 320.084 and must apply for the license plate issued under this section in lieu of or in exchange for the motor vehicle license number plate authorized by s. 320.084; and

(b) The veteran must offer, in addition to the proof required by s. 320.084(1), proof that due to a service-connected disability he is a paraplegic.

(3) Upon request, the department shall issue, to a person who has received a motor vehicle license plate under subsection (2), a designation plate containing only the internationally accepted wheelchair symbol, to be displayed on the front of a vehicle.

(4) No county or municipality, or any agency thereof, may exact from any person who is issued a designated "DV" license plate under s. 320.084 or a license plate bearing the internationally accepted wheelchair symbol under this section any fee for parking on the roads of this state or in any metered parking space.

(5) No penalty for parking on the roads of this state or in a metered space, except in a clearly defined bus loading zone or an area posted as a "NO PARKING" zone, may be imposed upon any person who is issued a designated "DV" license plate under s. 320.084 or a license plate bearing the internationally accepted wheelchair symbol under this section.

(6) The provisions of subsections (3) and (4) of s. 320.084 apply to license plates issued under this section.

320.0843 License plates for wheelchair users.

(1) Any owner or lessee of a motor vehicle who resides in this state and is permanently confined to a wheelchair, upon application to the department accompanied by competent and appropriate proof of disability, and upon payment of the license tax for a motor vehicle registered under s. 320.08(2), (3)(a), (b), (c), or (f), (6)(a), or (9)(c) or (d), shall be issued a license plate as provided by s. 320.06 which, in lieu of the serial number prescribed by s. 320.06, shall be stamped with the international wheelchair user symbol after the serial number of the license plate.

(2) All applications for such license plates shall be made to the department.

320.0845 License plates for members of Paralyzed Veterans of America.

(1) Any owner or lessee of a motor vehicle who resides in this state and is a member of the Paralyzed Veterans of America, upon application and payment of the appropriate license tax and fees accompanied by proof of such membership, shall be issued a motor vehicle license plate, as provided in s. 320.06, which shall be imprinted with the name of said organization to the extent that space permits on the license plate with the serial letters prescribed by s. 320.06(1)(a).

(2) All applications for such license plates shall be made to the department.

320.0848 Handicapped persons; issuance of exemption entitlement parking permits; permits for certain providers of transportation services to physically disabled persons.

(1)(a) The Department of Highway Safety and Motor Vehicles shall, upon application, issue an exemptions entitlement parking permit to any handicapped person who is currently certified by a physician licensed under chapter 458 or chapter 459 or a podiatrist licensed under chapter 461 or comparable licensing in another state, by the Division of Blind Services or the Department of Education, or by the Adjudication Office of the Veterans Administration as being severely physically disabled and having permanent mobility problems which substantially impair his ability to ambulate or who is certified as legally blind.

(b) The Department of Highway Safety and Motor Vehicles shall annually, upon application, renew the exemption entitlement parking permit of any handicapped person upon presentation of the certification required by paragraph (a) or the identification card issued by the department with the previous permit together with proper identification and an affidavit of the department signed by the applicant which attests to the applicant's continued disability.

(c) The Department of Highway Safety and Motor Vehicles shall promulgate rules, in accordance with chapter 120, for the issuance of a permit to any organization which can adequately demonstrate a bona fide need for such permit because the organization provides regular transportation services to disabled or severely handicapped persons who are certified as provided in paragraph (a).

(2) The parking permit shall be a metal taglet and shall be renewed by issuance of a validation decal annually in conjunction with renewal of motor vehicle registration license plates or the date of birth of the applicant. The parking permit shall have the words "PARKING PERMIT" across the upper portion, the international symbol of accessibility in a contrasting color in the center so as to be visible, and a sequential audit number across the lower portion. The parking permit shall be affixed to the lower left corner of the rear license plate of any vehicle used to transport the applicant. The department may issue one additional exemption entitlement parking permit to any applicant who demonstrates that an additional permit is needed.

(3) The department shall set the fees to be paid by the applicant for the parking permit and renewal decal, which shall be $5 for the initial parking permit, $1 for each additional parking permit, $5 for each renewal decal, and $1 for each additional renewal decal. The Department of Highway Safety and

Motor Vehicles shall receive $3.50 from the moneys derived from the proceeds of the initial exemption entitlement parking permit fee and $3.50 from the moneys derived from the proceeds of the renewal decal fee therefor, and the tax collector of the county in which the fee was generated shall receive $1.50 from each such fee, to defray the expenses of administering this section.

(4) Any person who fraudulently obtains or unlawfully uses such a parking permit or who uses an unauthorized replica of such parking permit with the intent to deceive is guilty of a nonmoving traffic violation, punishable as provided in ss. 318.18(2) and 316.008(4).

3. Florida Bureau of Elevators;

Subsection 399.01, Florida Statutes, "Definitions."

(3) "Elevator" means all permanently installed machinery, apparatus, and equipment used in raising and lowering a car, cage, or platform vertically between rails or guides; and the term also includes escalators and moving walks, but does not include hand-operated dumbwaiters, construction hoists, or other similar temporary lifting or lowering apparatus.

Section 399.035, Florida Statutes, "Elevator Accessibility Requirements for the Physically Handicapped."

1. Each elevator, the installation of which is begun after October 1, 1980, shall be made accessible to physically handicapped persons in accordance with the standard "Suggested Minimum Passenger Elevator Requirements for the Handicapped" of the National Elevator Industry, Inc., July 1976 edition, as revised May 1977, with the following exceptions:

a. Floor level numbers or letters and essential control designation symbols on the inside control panel of the elevator car shall be placed at a minimum of 35 inches above the floor and raised a minimum of 0.025 inch, and a Braille symbol raised a minimum of 0.025 inch shall be placed directly adjacent to each such control marking. No control marking may be recessed.

b. In a building having any elevators which do not provide access to every floor level, elevator hallway call buttons shall be marked with Arabic and Braille symbols which indicate floor levels to which access is provided. Such symbols shall be placed directly above each call button.

c. Door jamb markings shall be a minimum of 2 inches in height and shall be raised a minimum of 0.025 inch.

d. Each elevator car interior shall have a handrail on at least one wall. All handrails shall be smooth with no sharp edges and shall not be more than 1 1/2 inches thick. Handrails shall be continuous and shall extend from and to a point that is no more than 4 inches from an adjacent wall or handrail. The inside surface of handrails shall be 1 1/2 inches clear of the car wall. The distance from the top of the handrail to the finished car floor shall be at least 31 inches and not more than 33 inches. Padded or tuffed material or decorative materials such as wallpaper, vinyl, cloth, or the like may not be used on handrails.

e. Each elevator covered by this section shall be available to be used at any time to assist the physically handicapped in the event of emergency evacuation. The requirements of the latest revision of rules 211.3 and 211.4 of the American National Standards Institute standard ANSI A17.1 (1978) shall be complied with to meet the requirements of this paragraph.

f. Communications systems shall be positioned under the inside control panel of the car so that the center line of the installation is at a minimum height of 18 inches and a maximum height of 48 inches, with the identification marking raised a minimum of 0.025 inch and placed at the center of the access panel. A Braille symbol raised a minimum of 0.025 inch shall be placed directly adjacent to each such identification marking.

g. A car position indicator shall be provided above the car operating panel or over at least one opening of each car to show the position of the car in the hoistway by illumination of an indicator corresponding to the landing at which the car is stopped or passing. Indicators shall be on a contrasting color background and shall be a minimum of one-half inch in height. An audible signal shall sound to tell a passenger that the car is stopping at a floor served by the elevator.

h. Interior surfaces of car enclosures shall be of fire-resistive material, and walls shall be surfaced with non-abrasive material. All materials exposed to the car interior shall conform to the standards of the Elevator Safety Code. Floor coverings shall have a nonslip hard surface. Carpeting, if used on floors, shall be securely attached, heavy-duty, with a tight weave and low pile, and installed without padding. Vinyl or similar floor coverings shall be without padding.

i. A bench or seat may be installed on the rear wall of the elevator car enclosure, provided the bench or seat does not protrude beyond the vertical plane of the elevator car enclosure wall when folded into a recess provided for the bench or seat and, when not in use, the bench or seat automatically folds into the recess. The bench or seat shall be capable of supporting a live load of at least 250 pounds on any 12 inch by 12 inch area. No padded, tufted, or other decorative material may be used to cover the bench or seat. Under no circumstances may the bench or seat encroach on the minimum clear-inside-car dimensions specified in this section.

j. Car and hoistway doors shall be power-operated, automatic, and of the horizontal slide type with a minimum clear opening width of 36 inches. Doors shall be provided with a door reopening device which will function to stop and reopen a car door and adjacent hoistway door in case the car door is obstructed while closing. This reopening device shall also be capable of sensing an object or person in the path of a closing door without requiring contact with the door for activation at a nominal 5 inches and 29 inches above the finished floor. Such device shall be operative at all times.

k. Any building of three or fewer stories may be equipped with elevators of 1,500 pound capacity if the minimum clear-inside-car dimensions are no less than 51 inches wide and no less than 51 inches deep, the door opening is at least 32 inches and not centered but is at a side of the car, and the inside car control panel is mounted adjacent to the door opening on the car wall that is adjacent to the door opening.

l. The exception provided in the "Suggested Minimum Passenger Elevator Requirements for the Handicapped" in paragraph 6 of the standard for elevators in schools, institutions, or other buildings specifically authorized by local authorities is not applicable in this state.

2. Any building more than three stories high, the construction of which was begun on or after October 1, 1978, shall contain at least one elevator which will accommodate an ambulance stretcher 76 inches long and 24 inches wide in the horizontal position.

3. This section applies only to elevators available for the transportation of the general public. This section does not apply to elevators restricted by key or similar device to a limited number of persons in a building that has an elevator that otherwise meet the requirements of this section or to elevators primarily used for the transportation of freight. This section does not apply to dumbwaiters or escalators.

4. This section supersedes all other state laws and regulations affecting the accessibility of passenger elevators to the physically handicapped, and the standards established by this section may not be modified by municipal or county ordinance.

4. Florida Department of Education, Florida Administrative Code, Rules Chapter 6A-2.045.

(7) Requirements for physically handicapped. Any new building or facility intended for use by students and board employees shall be constructed in accordance with this rule and ANSI A117.1, "Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People", 1980. The following listed requirements shall also apply:

(a) In new facilities and in remodeling projects of the amounts set forth in Section 255.21, Florida Statutes, minimum facilities for the physically handicapped shall be provided where applicable as follows:

1. Parking Spaces -
   1 space per 20 parking spaces
   2 spaces per 21 - 100 parking spaces
   4 spaces per 100 - 500 parking spaces
   5 spaces per 500 or more parking spaces.

At least one (1) space shall be provided adjacent to a building in each parking area located adjacent to a building.

2. Building Entrances -
   1 per building.

3. Toilet Rooms -
   1 of each fixture and accessory in each group toilet room.
   1 in each K-3 grade group (use standard size fixtures).
   1 in each special facility toilet room, e.g., shops.
   1 for each sex for faculty.
   1 for each janitor.
   1 for food preparation area.
   1 for each sex clinic.

4. Upper Floor Access - Ramp or Elevator

Sufficient number to provide reasonable access considering class change duration and distances to be traveled.

5. Interconnection of all facilities, including buildings and grounds.

6. Stairs -
1 for each sex.

7. Drinking Fountains -
At all drinking fountain locations.

8. Showers -
1 for each sex.

9. Telephones -
1 at each pay phone location.

10. Ramp or lift access to all stages or stage platforms.

(b) Building or facility accessibility to the handicapped is not required where the same program is offered on the educational plant in a building or facility that is accessible to the handicapped.

5. Florida Department of General Services, Section 255.21, Florida Statutes, "Special facilities for physically disabled."

(1) Any building or facility intended for use by the general public which, in whole or in part, is constructed or altered or operated as a lessee, by or on behalf of the state or any political subdivision, municipality, or special district thereof or any public administrative board or authority of the state shall, with respect to the altered or newly constructed or leased portion of such building or facility, comply with standards and specifications established by s. 553.48, Florida Statutes.

(2) The Department of General Services shall establish by rule a standing code panel to consider modifications or waivers to handicapped standards or other codes and standards for state building designs.

6. Florida Public Service Commission, Florida Administrative Code, Rules Chapter 25-4.076.

(9) Each telephone station installed after January 5, 1987 shall conform to subsections 4.29.2 - 4.29.4 and 4.29.7 - 4.29.8 of the American National Standards, "Specification for Making Buildings and Facilities Accessible and Usable by Physically Handicapped People", approved February 5, 1986 by the American National Standards Institute, Inc. (ANSI A117.1, 1986). Except for locations on floors above or below entry level in buildings not serviced by a ramp or elevator, such stations shall be placed in areas accessible to the physically handicapped.

7. Department of Transportation, "Specifications for Sidewalk Ramps and Curb Cut Ramps."

The requirements for the installation of permanent curb ramps for handicapped persons at crosswalks at all intersections of newly constructed public roads and highways were added to the law in 1974. The law has been amended three times since, with such amendments being technical in nature. To implement this law, the State of Florida's Department of Transportation, Road Design Section, has issued specifications for the proper construction of curb ramps depending upon site conditions. Specifications are provided for curb ramps at medians, and at crosswalks depending upon the nature of pedestrian traffic.

Note: Designers should give consideration to providing sufficient space for the passage of wheelchair users along walkways at the top of curb ramps.

8. U. S. Fair Housing Act.

Part 100 - Discriminatory conduct under the Fair Housing Act (24 CFR 100), Subpart D - Prohibitions Against Discrimination Because of Handicap.

9. Florida Fair Housing Act, Sections 760.22 - 760.37, Florida Statutes and Subsection 553.48(4).

Subsection 553.48(4), Florida Statutes.

Covered multifamily dwellings, as defined in s. 760.22, available for first occupancy on or after March 12, 1991, are subject to the requirements of s. 760.23(9)(c) relating to design and construction for handicapped accessibility.

Subsection 760.23(9)(c), Florida Statutes.

Covered multifamily dwellings as defined herein which are intended for first occupancy after March 13, 1991, shall be designed and constructed to have at least one building entrance on an accessible route unless it is impractical to do so because of the terrain or unusual characteristics of the site as determined by commission rule. Such buildings shall also be designed and constructed in such a manner that:

1. The public use and common use portions of such dwellings are readily accessible to and usable by handicapped persons.

2. All doors designed to allow passage into and within all premises within such dwellings are sufficiently wide to allow passage by a person in a wheelchair.

3. All premises within such dwellings contain the following features of adaptive design:

a. An accessible route into and through the dwelling.

b. Light switches, electrical outlets, thermostats and other environmental controls in accessible locations.

c. Reinforcements in bathroom walls to allow later installation of grab bars.

d. Usable kitchens and bathrooms such that a person in a wheelchair can maneuver about the space.

4. Compliance with the appropriate requirements of the American National Standards Institute for buildings and facilities providing accessibility and usability for physically handicapped people, commonly cited as ANSI A117.1-1986, suffices to satisfy the requirements of subparagraph 3.

State agencies with building construction regulation responsibility or local governments, as appropriate, shall review the plans and specifications for the construction of covered multifamily dwellings to determine consistency with the requirements of this paragraph.

10. County Road System, Chapter 336.046, Florida Statutes, "Regulation of Bus Benches and Transit Shelters Within Rights-of-Way".

Any bus bench or transit shelter located on a sidewalk within the rights-of-way of any road on the county road system shall be located so as to leave at least 36 inches clearance for pedestrians and persons in wheelchairs. Such clearance shall be measured in a direction perpendicular to the centerline of the road.

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